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# The Province of Alberta

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IN THE MATTER OF "THE NATURAL  
GAS UTILITIES ACT"

—and—

IN THE MATTER OF an Enquiry into  
Scheme to be adopted for Gathering,  
Processing and Transmission of  
Natural Gas in Turner Valley

---

G. M. BLACKSTOCK, Esq., K.C., *Chairman*

Dr. E. H. BOOMER, F.C.I.C., *Commissioner*

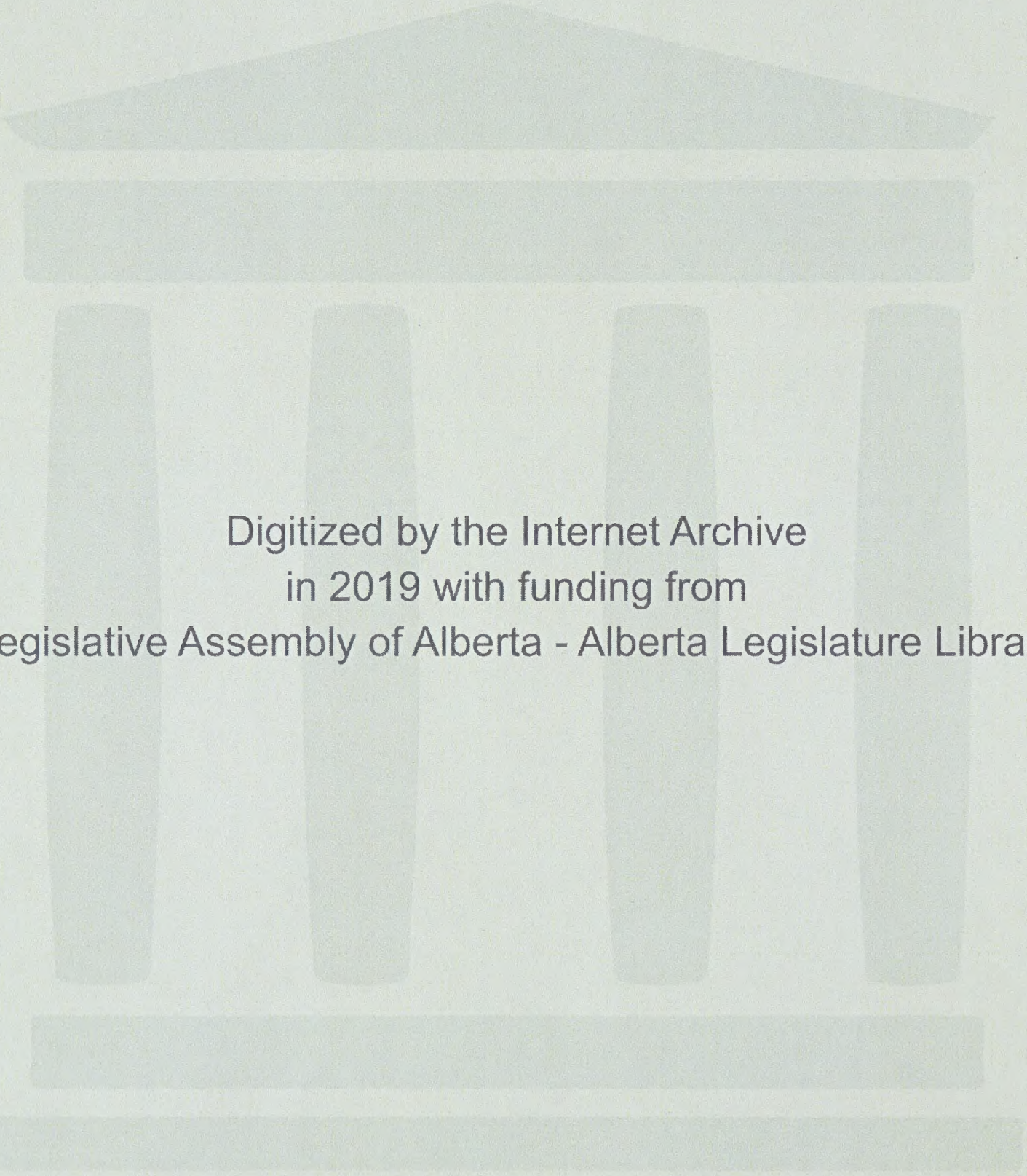
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***Session:***

**CALGARY, Alberta** January 23rd, 1946

**VOLUME** 65





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VOLUME 65

January 23rd, 1946

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H-1-1 9.15 a.m.

H. Zinder, recalled,  
Dir.Exam. by Mr. McDonald.

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January 23rd, 1946.  
Wednesday, 9.15 a.m.Session

MR. McDONALD: Mr. Chairman, I just do not  
recollect, Sir, whether Mr. Blanchard had this statement  
marked as an exhibit yesterday?

THE CHAIRMAN: Which one?

MR. McDONALD: The statement of account of the  
Royalite Oil Company, December 31st, 1921, to December  
21st, 1944, as between the Gas Company and the Royalite  
Oil Company?

THE CHAIRMAN: No.

MR. McDONALD: And the statement of MCF sales  
and average rates from 1921 and 1922 to 1944.

THE CHAIRMAN: He was going to have copies of  
them made.

MR. McDONALD: The copies are made now, and Mr.  
Zinder was going to refer to them.

THE CHAIRMAN: That will be Exhibit 138.

STATEMENT OF ACCOUNT BETWEEN  
CANADIAN WESTERN AND ROYALITE  
OIL COMPANY LIMITED, 1921 to 1944,  
and MCF SALES AND AVERAGE RATE  
STATEMENT 1921 to 1944, MARKED  
AS EXHIBIT 138.

HANINA ZINDER, recalled, already  
sworn, examined by Mr. McDonald, testified as follows:-

Q Mr. Zinder, you had an opportunity to look at this state-  
ment of MCF Sales and average rate, 1921 to 1944, yestereay?

A I did.

Q What have you got to say with regard to that statoment?

A I was very much interested in this statement for the







H. Zinder,  
Dir. Exam. by Mr. McDonald.

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information that it might reveal with regard to what happens with changes in rates. In my submission I indicated that it was not so much a question of the fact that use might go down with an increase in rate, but the question of degree to which it might go down with an increase in rate. Likewise, the reverse situation is true. That is, what would happen with a reduction in rates? It is the degree to which these reactions occur that determines what the revenue might be. Between 1921 and 1922, or at the end of 1921, the Canadian Western put into effect a very substantial rate increase. I analyzed the result between 1921 and 1922, and find these figures: The MCF did go down  $9\frac{1}{2}\%$  with  $26\text{-}8/10\text{ths}$  per cent increase in average rate. The revenue went up  $15\%$ . Therefore, in spite of the  $26\text{-}8/10\text{ths}$  per cent increase in rate, the revenue still went up  $15\%$ . Now, that is for the domestic class of consumers.

I think, Mr. Chairman, if we go further, the characteristics that you mentioned yesterday of use coming back again can be noted here. If you compare 1921 and 1925, which was a four-year period in this case, the average rate in that period or average revenue per MCF for domestic use went up from 35.02 cents to 36.11 cents. That represents an increase of  $31\text{-}6/10\text{ths}$  per cent. The use actually reversed itself and increased and by 1925 the MCF sold to domestic customers increased by  $44\%$ , and the revenue increased by  $90\%$ . Now, undoubtedly there might be many factors explaining the situation. However, I think it is illustrative of the point I have tried to make that there are many factors which influence relationship between price and use. And, whereas, there is a tendency for use to vary inversely with price, very frequently,







H.Zinder,  
Dir.Exam. by Mr. McDonald.  
Cr. Exam. by Mr.Steer.

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in my experience, that tendency because of influence of other factors has not been able to, you might say, assert itself or show itself. I think that is the only comment I would like to make, Mr. McDonald, upon that.

Q That is all, Sir, on Competitive Fuels, unless there is further cross-examination.

.....

CROSS-EXAMINATION BY MR. STEER

Q You have not made any such analysis with regard to any recent years, Mr. Zinder?

A No, I have not.

Q You know that the conditions in this Province were that in 1921 Calgary had a very short supply of gas?

A Yes.

Q You know that people were very much worried about where the gas was going to come from to supply these people?

A I understand that was the case.

Q And that being so, and gas being in short supply, you wouldn't say that the same conditions that you found by an analysis of those figures would be revealed if you analyzed the present day figures with a more or less saturated market, would you?

A No, I wouldn't say that.

Q Why did you go back to 1921? Why didn't you make an analysis of some recent years when we are dealing with recent conditions?

A Mr.Steer, the reason I did not, I was looking for any facts or figures I could get with what might happen with the rate increased. There was not any rate increase in recent years in Calgary.







H. Zinder,  
Cross-Exam. by Mr. Steer.

- 5204 -

Q There have been rate decreases, haven't there?

A Yes.

Q And you did not study those?

A No.

Q And you did not study what the facts were or the rate decreases on consumption?

A No, I have not.

Q You went back to 1921 to get figures to support your theory, that is what you did?

A I did not make a study either, Mr. Steer, with respect to rate increases, except that I was interested in those figures, and when those figures were available and introduced into the record yesterday, I analyzed them and felt that the analysis was of interest.

Q You analyzed them without taking into consideration the special conditions of those years that you have told me about, is that right?

A Well, Mr. Steer, I have stated for the record that there may be conditions which explain that situation.

Q You knew of the existence of those conditions, you knew of the existence of those conditions in 1921?

A I did.

Q Yes. Would you say that those are conditions which might explain the theory that you are putting forward here?

A I think they do.

Q Yes. All right. And you made no examination of any figures since 1921 or 1922?

A No, I was interested in seeing what would happen in a rate increase. That is all.

THE CHAIRMAN:

Any further cross-examination?

Mr. Chambers?







H.Zinder,  
Cross-Exam.by Mr. Chambers. - 5205-

CROSS-EXAMINATION BY MR. CHAMBERS

Q The only thing I have is I would like to know whether Mr. Zinder got the information in response to my request with regard to the coal and the gas in Pittsburgh?

A I did, Mr. Chambers. The information I have received is that for domestic purposes the prevailing price of coal in Pittsburgh is as follows: Mine run, \$5.35 for lump coal, - I am sorry, - for Mine run coal, \$5.35; for lump coal, \$6.00 to \$6.50, for delivery at the curb. The B.T.U. content of this coal is approximately 14,000 B.T.U.s.

Q Per ton?

A Per pound.

Q Per pound?

A Yes.

Q You mean there, the delivery at the curb, is that the curb at the front of the house?

A That is right.

MR. STEER: Where is this?

MR. CHAMBERS: Pittsburgh.

A Pittsburgh, Pennsylvania.

Q And then you made a check, did you, of the American Gas Association rates?

A I did. I found there are two companies serving gas in Pittsburgh, Pennsylvania.

Q By the way, that is natural gas?

A That is natural gas. The Equitable Gas Company has a general service rate which is applicable to house heating and I would say under that rate house heating would be at 60 cents per MCF. The rate is as follows, the first 15,000 cubic feet,



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1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

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H.Zindor,  
Cross-Exam. by Mr. Chambers.

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60 cents net.

Q That is per month ?

A That is per month.

Q Yes?

A The next 85 thousand cubic feet, 45 cents net. All over 100,000 cubic feet, 43 cents net. The second company.....

Q Yes?

A Is the Peoples' Natural Gas Company. And their rate which would be applicable to house heating is for the first 700 cubic feet, \$1.00, the next 300 cubic feet 7 cents per hundred, the next 4000 cubic feet 65 cents per thousand, the next 5000 cubic feet 60 cents per thousand, the excess over 10,000 cubic feet at 45 cents per thousand. Those are net figures.

Q Does the Gas Association books show the B.T.U. of that gas?

A It does.

Q What is it?

A For the Equitable Gas Company the B.T.U. is reported as 1115.

Q Yes?

A For the Peoples' Natural Gas Company, the B.T.U. is 1100.

Q That is all, thanks.

(Go to Page 5207).



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T-1-1 9.30 A.M.

H. Zinder,  
Cross-Exam. by Mr. Harvie.  
Cross-Exam. by Mr. Fenerty.  
Cross-Exam. by Mr. Chambers. - 5207 -

CROSS-EXAMINATION OF THE SAME WITNESS BY MR. HARVIE.

Q From your experience, Mr. Zinder, what would you say would be maybe the mean for the rate for household heating of of the People's natural gas that would be comparable with your 60 cent rate for your Equitable Company?

A For the Equitable Gas Company I would say 60 cents would be representative of the house heating rate in Pittsburgh. For the People's Natural Gas Company probably close to 60 cents, somewhere between 60 cents and 65 cents per MCF.

THE CHAIRMAN: Any further cross-examination on this phase?

.....

CROSS-EXAMINATION OF THE SAME WITNESS BY MR. FENERTY.

Q Can you tell us, Mr. Zinder, what percentage of consumers burn natural gas? And what percentage burn coal?

A The saturation of Pittsburgh is approximately 15%.

Q 15%?

A Yes.

Q Thank you.

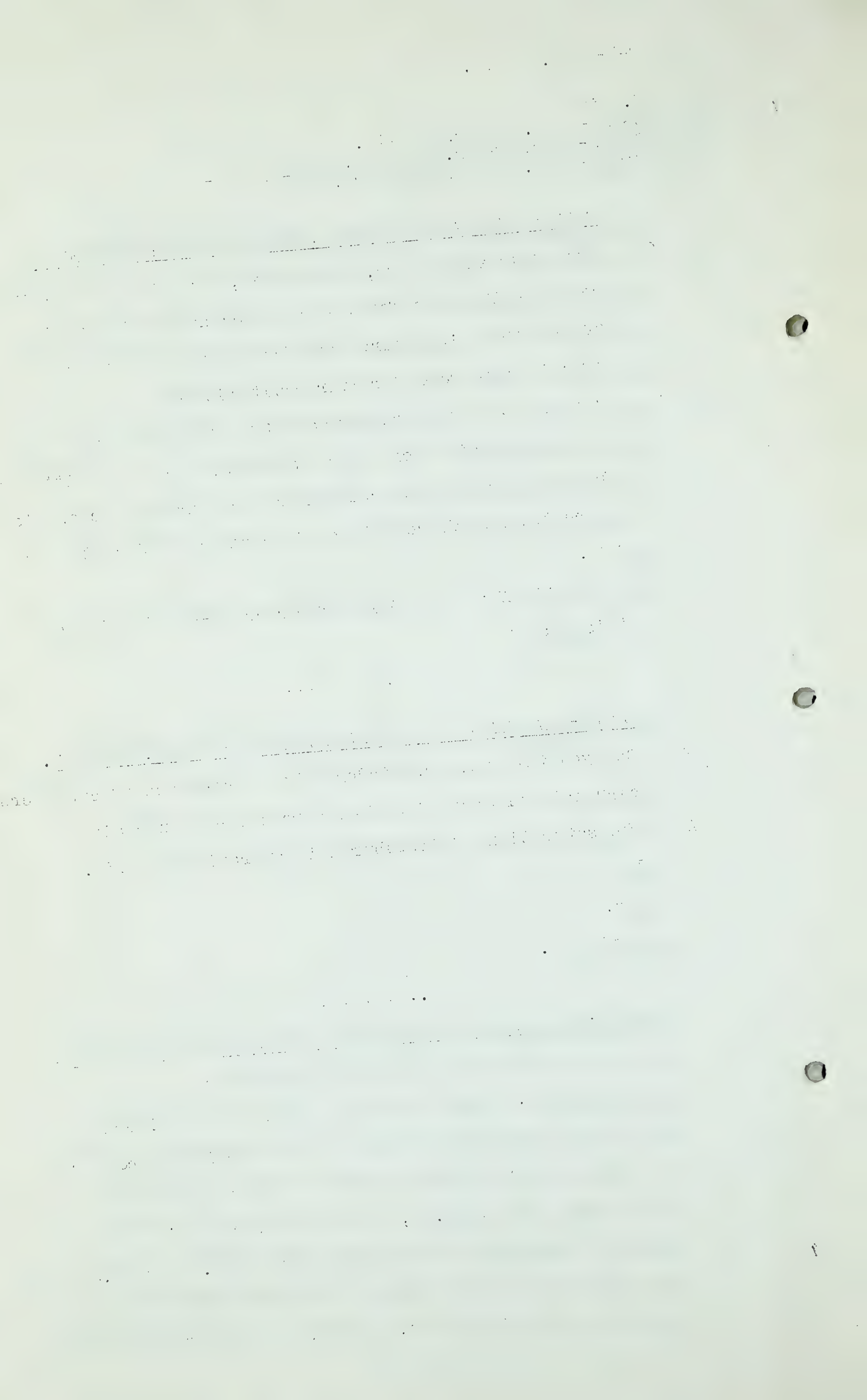
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CROSS-EXAMINATION OF THE SAME WITNESS BY MR. CHAMBERS.

Q Is that for domestic or the whole market?

A For domestic. I might say that I took these figures and on the same basis as used in my submission compared the price of coal with the price of gas. I took the lowest cost coal, \$5.35, the most favorable in the sense of comparing it as against using \$6.00 or \$6.50 coal and I have added nothing for delivering the coal from the curb to the bin. At \$5.35, 55% efficiency for







H. Zinder,  
Cross-Exam. by Mr. Chambers.  
Cross-Exam. by Mr. Steer.

- 5208 -

coal and 70% efficiency for gas, 14,000 B.T.U. coal is equivalent to 26.8 cents per MCF as against the 60 cent rate.

Q MR. HARVIE: Twenty-six point?

A 26.8 cents.

.....

CROSS-EXAMINATION BY MR. STEER.

Q You are giving these figures for the State of Pennsylvania?

A For the City of Pittsburgh, Pennsylvania.

Q What is the average consumption per customer in the City of Pittsburgh?

A I do not know, sir.

Q What is the average consumption per customer in the City of Calgary?

A I do not know.

Q Should you not know in order to make a valid comparison?

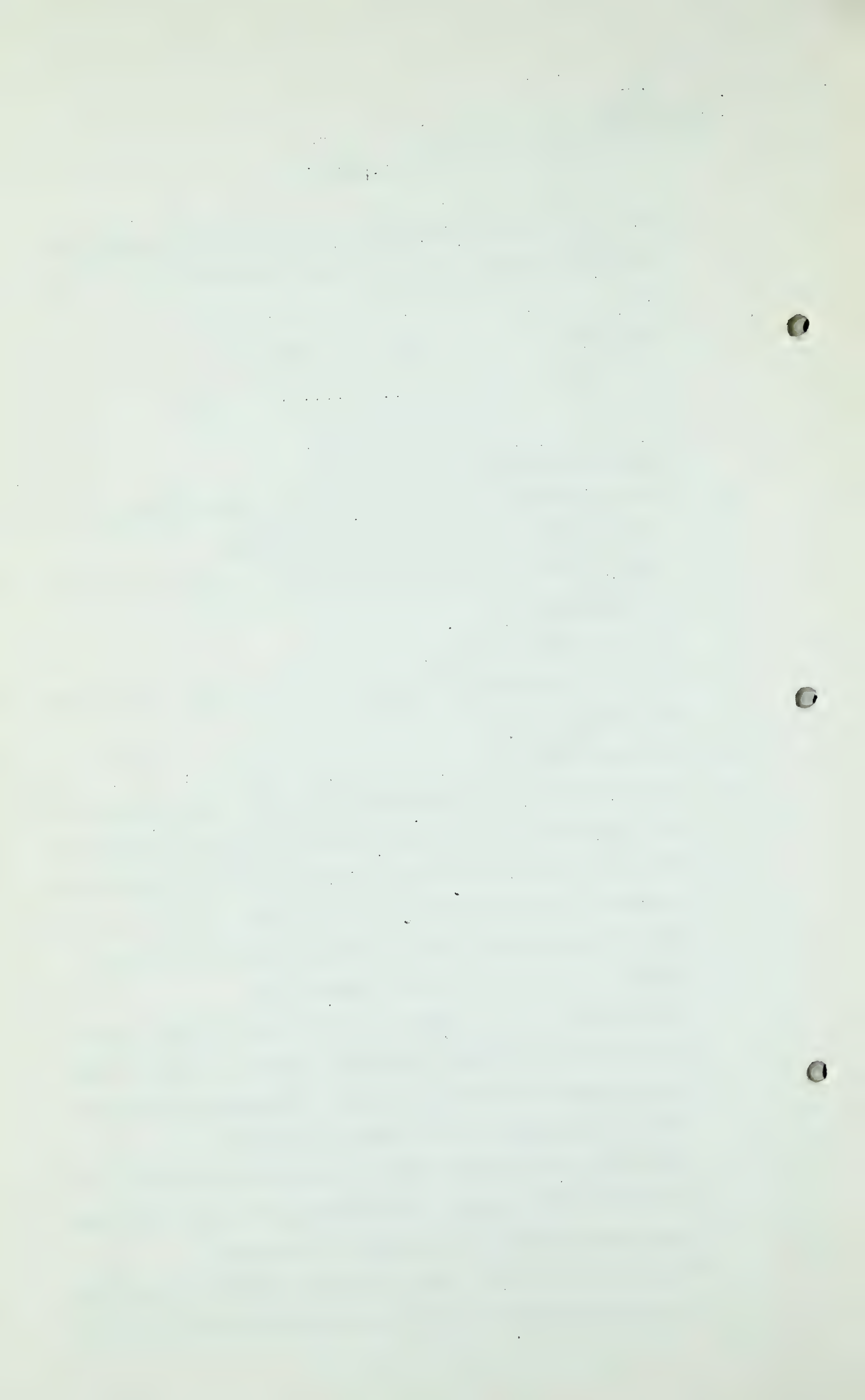
THE CHAIRMAN: Mr. Steer, perhaps you will remember that Mr. Chambers handed Mr. Zinder a book and asked him to extract information from it. I think he is only giving the information that can be found in that book at the request of counsel on cross-examination.

MR. STEER: Exactly so, sir, but I still think we should have an answer to my last question, as to whether a valid comparison would require the consumption in the City of Pittsburgh and the City of Calgary.

A I have not compared the City of Pittsburgh with the City of Calgary, Mr. Steer. I have taken coal prices in Pittsburgh and compared the rate in Pittsburgh.

Q That is so. We will suppose for the moment that in the City of Pittsburgh gas is used for cooking and hot water







H. Zinder,  
Cross-Exam. by Mr. Steer.

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heating.

A All right.

Q We will suppose in the City of Calgary, as you know, that it is used for all domestic purposes including house heating. Does that make any difference?

A Difference in what?

Q In your comparison.

A Not the comparison I have just made.

Q It does not make any difference, I see. So that what you are suggesting, or I do not know whether you are suggesting it or whether counsel is suggesting it, is that because you find the price of 60 to 65 cents in Pittsburgh that that is a justification for a high price of gas in the City of Calgary.

A I never suggested that, Mr. Steer.

Q And you are not suggesting that?

A No.

THE CHAIRMAN: Anything further? Have you anything Mr. Blanchard?

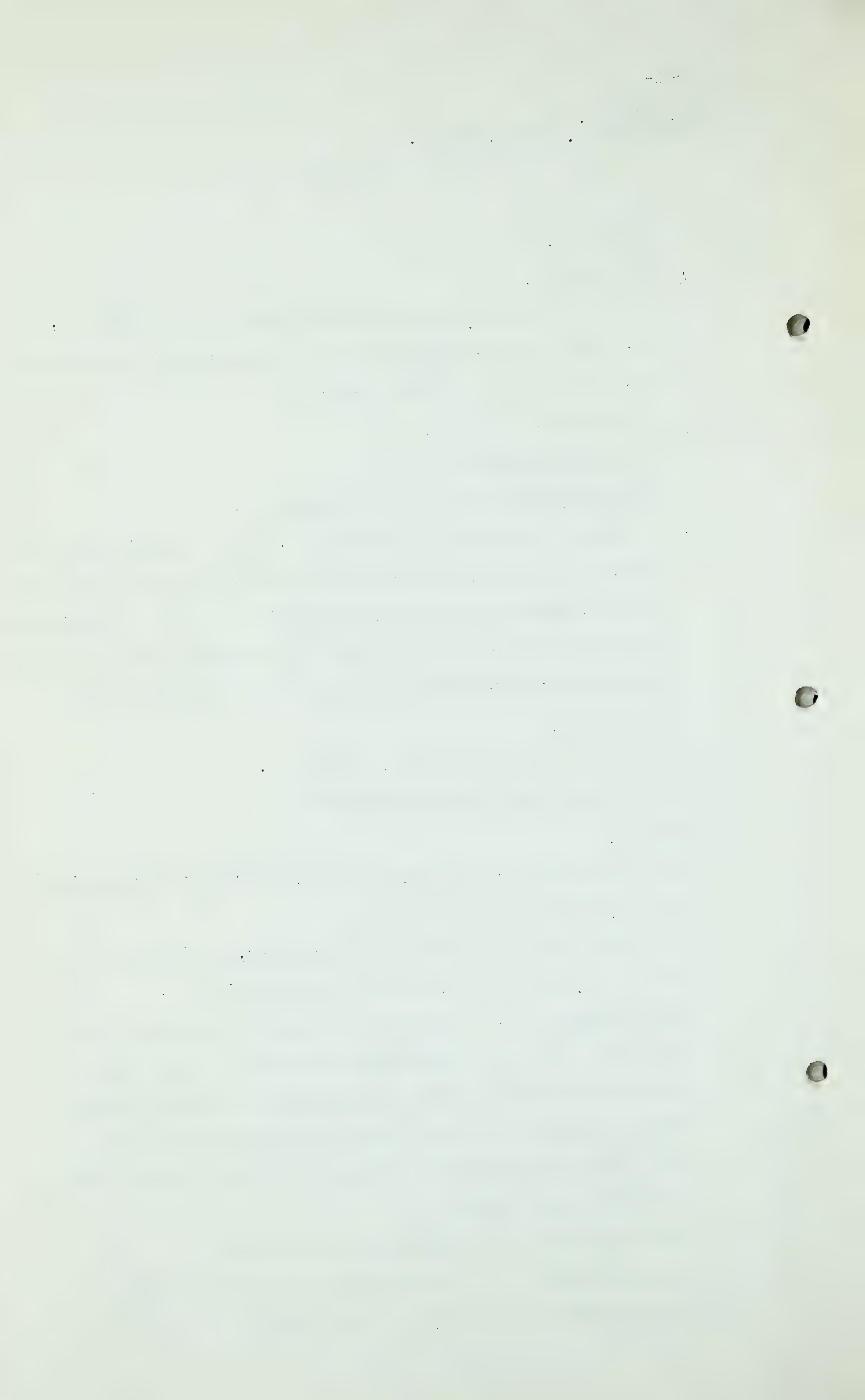
MR. BLANCHARD: I am sorry, sir, I did not hear you say 9.15 and I have not heard the evidence.

MR. McDONALD: I intend to request permission, Mr. Chairman, to file in this Hearing copies of the Public Utility Commission Orders in respect to the Gas Company rates starting with the Order of the 30th of November, 1921 and the Order made, I think, in 1926. I have not a copy of that with me.

THE CHAIRMAN: What is the first one?

MR. McDONALD: The 30th day of November, 1921.

THE CHAIRMAN: And the other one?





H. Zinder,  
Direct Ex. by Mr. McDonald.

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MR. McDONALD: The other one I have with me is the 20th day of July, 1931. I intend, as soon as I get copies, to file the third Order that was in 1926.

MR. CHAMBERS: What is the date of the 1926 one?

MR. McDONALD: I do not know the date of the 1926 one.

MR. CHAMBERS: Will they all be filed as one exhibit?

THE CHAIRMAN: Yes.

THREE ORDERS OF THE PUBLIC  
UTILITY COMMISSION NOW MARKED  
AS EXHIBIT 139.

MR. HARVIE: Are the Orders covering rates?

MR. McDONALD: Yes, the rate base fixing. I have some copies to distribute. I note, Mr. Chairman, I have not the reasons for judgment in my Order of 1921. I think that should be added to it and I will get that certified too.

THE CHAIRMAN: All right.

.....

DIRECT EXAMINATION OF THE SAME WITNESS BY MR. McDONALD.

Q Mr. Chairman, when Mr. Zinder was giving evidence in November, he was asked certain questions on cross-examination relative to the Absorption Plant and the market and distribution of costs and repressuring phases generally. Mr. Zinder has prepared a statement based on the 1945 actual production figures and 1945 estimated costs, as contained in the exhibits filed by the two utility companies, illustrating the principle which he is advocating should be or which he suggested should be followed in allocating these costs. I think Mr. Zinder will deal with repressuring first and then deal with the Absorption Plant





H. Zinder,  
Dir. Exam. by Mr. McDonald.

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suggestion and then submit to cross-examination. Then will you go ahead with your statement?

A With regard to the Costs of Repressuring, the statement is as follows:

Three Submissions have been filed with the Board dealing with apportionment of the cost of repressuring stored gas, namely, the Royalite Submission, Exhibit #99, the Producers' Committee Submission, Exhibit #89, and W. H. Hamilton Submission, Exhibit #124.

The Royalite Submission as contained in Exhibit #99, is made by the producer controlling and marketing the greatest quantity of gas available for sale, both produced from the crude oil wells and Gas Cap area. The proposal briefly is that the Royalite Company will purchase gas produced in excess of market requirements which cannot be taken care of by conservation of Gas Cap gas, and requires to be stored.

The Royalite proposal is predicated on the assumption that the consumer shall agree to pay the present cost of gathering and compressing the repressured gas as a part of the current price of gas marketed. The producer, in agreeing to accept the discounted price of the current value of his gas in relation to the estimated term of storage, in effect bears the cost of financing the storage of the gas in the area, and makes possible the implementing of the undertaking of the Royalite Company to dispose of the gas stored when reproduced at the same price as then being paid by the consumer purchasing gas currently being produced at the time the gas is repressured.

The proposal with respect to the





H. Zander,  
Dir. Exam. by Mr. McDonald.

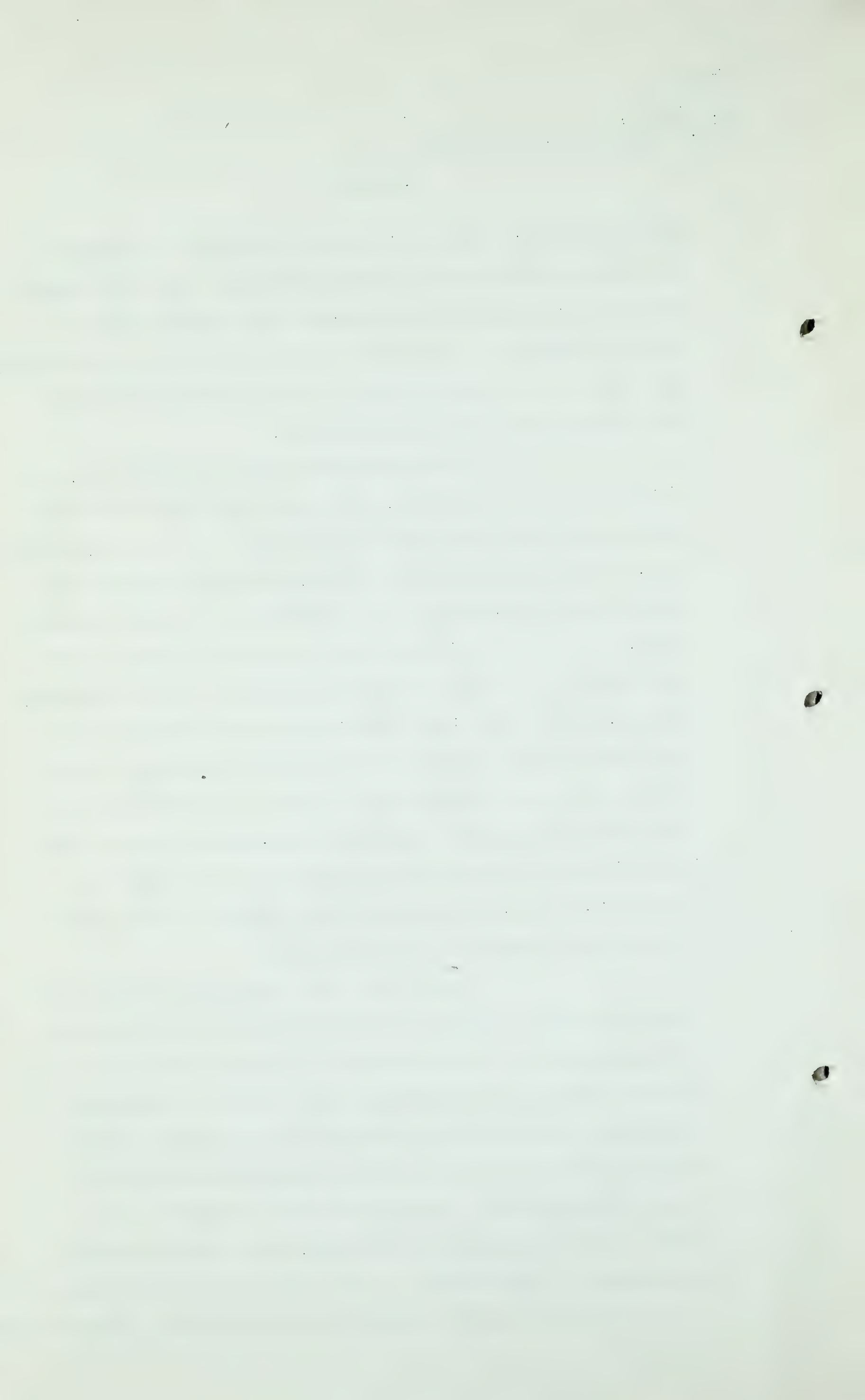
- 5212 -

British American area is in effect the same in principle as that submitted by the Royalite Company, with the exception that the producers will not receive the current price of the gas stored on a discounted basis, and will make available upon terms to be fixed by the Natural Gas Utilities Board the storage area and the input wells.

The costs involved in repressuring, in view of the plans proposed, are a portion of the gathering system costs and some direct costs incurred for repressuring only. The amount of capital investment and operating expenses made specifically for repressuring are comparatively small.

At the time of the peak demand on the gas system all equipment is being utilized to full capacity. However, due to the wide variation in temperature in this area and the large amount of gas used for heating, the use of gas during the non-heating season is substantially less than during the peak. During this off-season period there is considerable available capacity that can be used to repressure. Thus, a portion of the present system costs are properly allocable to repressuring.

There have been some calculations made and contained in Exhibits before the Board as to the cost of repressuring. At my previous appearance before this Board I recommended that the proper basis of allocating the costs of gathering and compressing was what I termed the Demand and Volumetric, or the Demand and Commodity basis of allocation. In order to both illustrate how this method of allocation would work, and also to arrive at a cost of repressuring, I have made such an allocation for the Madison and the British American Systems. Schedule "A"





H. Zinder,  
Dir. Exam. by Mr. McDonald.

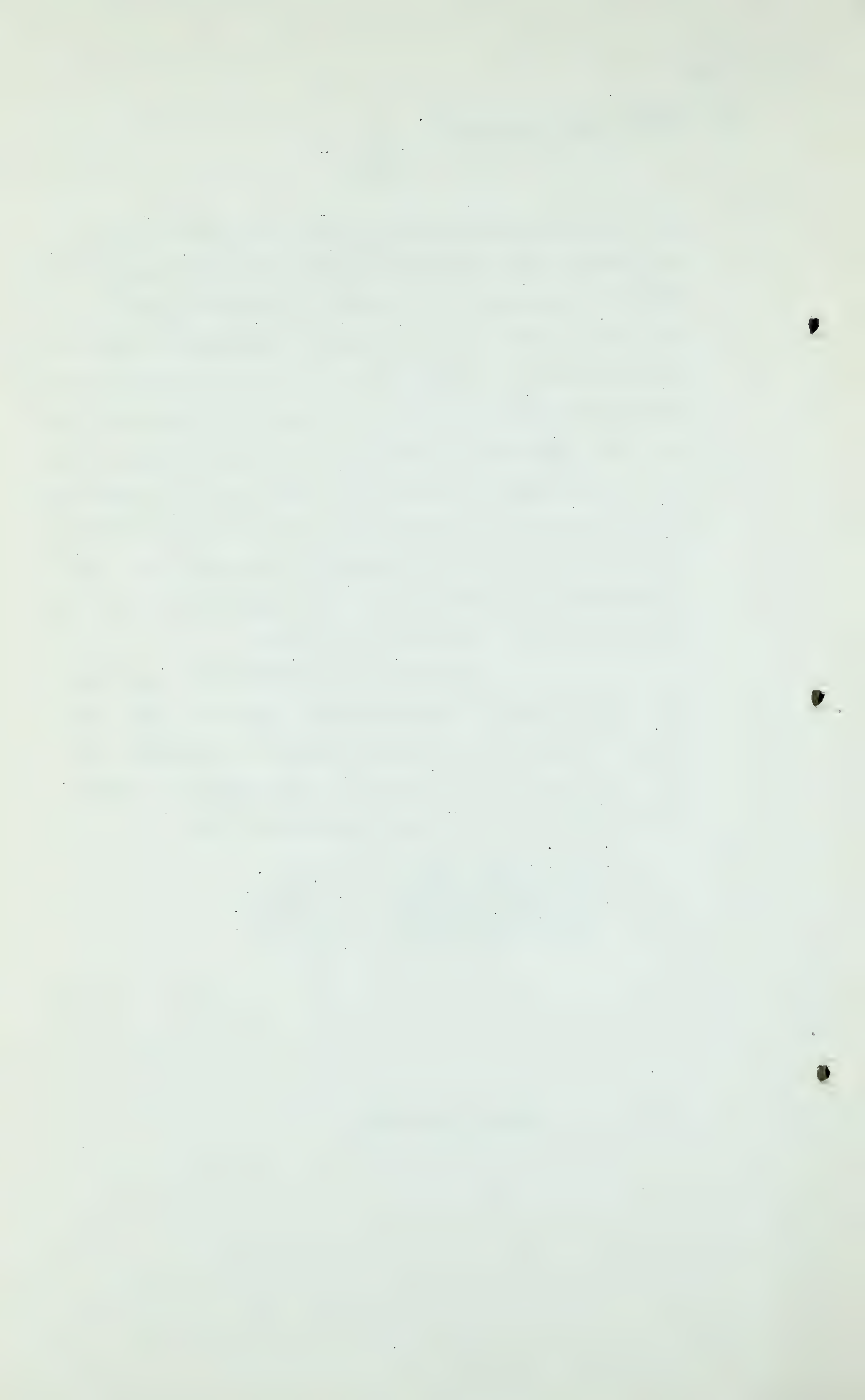
- 5213 -

shows an "Allocation of Costs - Wet Gas Gathering and Compressing" for the Madison system, and Schedule "B" is a similar allocation for the British American system. In both cases I have used cost figures introduced by each of these Companies. In using these figures no responsibility is taken for their accuracy, and likewise in adopting and using the  $9\frac{1}{2}\%$  rate of return shown by these figures it is not done with any recommendation that such is a reasonable rate of return. As stated, the purpose of these Schedules is to show the method of allocation and arrive at a cost of repressuring, assuming for these purposes that the cost figures shown are reasonable and proper.

Referring to Schedule "A", there are five subdivisions of the Madison gas gathering and compressing system that are jointly used for gathering gas to be delivered to the market, to the absorption plant, and for repressuring. These subdivisions are:

1. No. 1 Compressor.
2. No. 3 South Compressor Plant.
3. South Low Pressure - Wet Line.
4. South High Pressure - Wet Line.
5. North High Pressure - Wet Line.

(Go to page 5214)





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Under each one of these subdivisions there are five separate classifications of expenses, and in each case I have placed the depreciation, and return and taxes under the Demand column, and all other costs and expenses under the Volumetric column. There is thus obtained out of a total joint cost of \$515,266.00, an amount \$303,812.00 proportional to Demand, and \$211,454.00 proportional to Volume.

I may insert there that this is shown on Sheet 2 of Schedule 4.

Q MR. CHAMBERS: Schedule "A" is it not ?

A Schedule "A", I am sorry.

I have taken the foregoing joint expenses and allocated them in the next section of Schedule "A", which commences on Sheet 3 of Schedule "A", to Absorption, Market, and Repressuring. No Demand costs are allocated to Repressuring, since Repressuring operations are carried on completely off peak.  $9\frac{1}{2}\%$  of the Demand costs are allocated to Absorption, on the basis that this portion of the capacity of the gathering system at the time of the system peak is utilized for delivering gas used by the absorption plant. The  $9\frac{1}{2}\%$  allowance, gas shrinkage and gas fuel used in the absorption plant of the Madison system is taken from their Exhibit M-12. The balance of the Demand costs are then applicable to the market. Under the Volumetric costs, again  $9\frac{1}{2}\%$  of the total is allocated to the absorption plant. the balance of the Volumetric costs are distributed between Market and Repressuring in proportion to the percentages shown at the end of the table under "Gas Balance".

At the end of the Table, that is Sheet 4, of Schedule "A". I show there the gas balances and in the last column the percentages are shown that I have used in

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1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Lichtenthal and Whistler (1973). The total chlorophyll content was determined by the method of Arar and Cook (1977). The carotenoid content was determined by the method of Lichtenthal and Whistler (1973). The total carotenoid content was determined by the method of Arar and Cook (1977). The total protein content was determined by the method of Lowry et al. (1951). The total lipid content was determined by the method of Bligh and Dyer (1959). The total carbohydrate content was determined by the method of Dubois and Gilles (1950). The total nucleic acid content was determined by the method of Burton (1956). The total ash content was determined by the method of AOAC (1970). The total moisture content was determined by the method of AOAC (1970). The total dry weight was determined by the method of AOAC (1970). The total organic matter content was determined by the method of AOAC (1970). The total inorganic matter content was determined by the method of AOAC (1970). The total organic matter content was determined by the method of AOAC (1970). The total inorganic matter content was determined by the method of AOAC (1970).

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allocating the cost. I have taken as 100% the total gas to the absorption plant and distributed that between sales, which is the market, which is 81.9%, the repressured gas which is 8.6% and absorption plant and fuel which is  $9\frac{1}{2}\%$ , the three totals being 100%.

8.6% of the total Madison gathered volume is repressured, and 81.9% of the total gathered volume is sold.

The resulting distribution of joint costs shown by the table is Absorption \$48,950.00, Market \$448,131.00, and Repressuring \$18,185.00. To this share of the joint costs of Repressuring of \$18,185.00, there is next added those specific direct costs that have no purposes other than Repressuring. The total of these costs and their detail is shown on Schedule "A" and is \$10,794.00.

It is shown on Schedule "A" of Sheet 3 and commencing at the middle of the sheet. I have taken from the Exhibit the specific investment made for repressuring of \$41,300.00. I have taken depreciation on that and return and taxes. The depreciation has taken 4.4277%, return and taxes is taken on the basis of  $9\frac{1}{2}\%$ , the same as used in the other figures, and then the operating expenses of \$2,736.00 were as shown in the Exhibit. As I say the total of the details shown on Exhibit "A" are \$10,794.00. Thus the total cost of Repressuring is \$28,979.00.

From the allocation made in Schedule "A" a number of interesting average costs can be determined. The average cost of gas repressured is 2.2¢ per MCF. The average cost of repressuring gas per MCF of sales for the

The first of the year was a very dry one. The weather was very hot and the ground was very dry. The crops were very poor and the people were very poor. The first of the year was a very dry one. The weather was very hot and the ground was very dry. The crops were very poor and the people were very poor.

The second of the year was a very wet one. The weather was very cold and the ground was very wet. The crops were very good and the people were very rich. The second of the year was a very wet one. The weather was very cold and the ground was very wet. The crops were very good and the people were very rich.

The third of the year was a very dry one. The weather was very hot and the ground was very dry. The crops were very poor and the people were very poor. The third of the year was a very dry one. The weather was very hot and the ground was very dry. The crops were very poor and the people were very poor.

The fourth of the year was a very wet one. The weather was very cold and the ground was very wet. The crops were very good and the people were very rich. The fourth of the year was a very wet one. The weather was very cold and the ground was very wet. The crops were very good and the people were very rich.

The fifth of the year was a very dry one. The weather was very hot and the ground was very dry. The crops were very poor and the people were very poor. The fifth of the year was a very dry one. The weather was very hot and the ground was very dry. The crops were very poor and the people were very poor.



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Madison system is .24¢ per MCF, approximately one-quarter of a cent. The average cost per MCF of gas gathered and compressed is  $3\frac{1}{2}$ ¢ per MCF.

The roughly \$29,000.00 Repressuring cost must be recognized as an allocated cost and not as the increment or additional cost of repressuring the gas as against not repressuring it. The increment cost would be something slightly in excess of the direct cost shown of \$10,794.00. It is therefore of interest, and I believe significant, that this allocated cost of Repressuring in the Madison system is less than 1/4 of 1¢ per MCF of gas delivered for the market.

Schedule "B" carries through the same calculations for the British American system, just described in some detail for the Madison system in Schedule "A". The total joint cost involved in the British American system is \$233,202.00. The amount allocable to Repressuring is \$29,339.00. In this case, 32% of the total gas gathered is repressured as compared with the comparable figure for the Madison system of 8.6%. The direct costs representing return on investment made for repressuring and operating expenses in connection therewith, are shown as \$11,243.00, making a total Repressuring cost of \$40,582.00. This represents approximately 2.3¢ per MCF repressured as compared with the 2.2¢ per MCF of gas repressured on the Madison system. The average cost per MCF for all gas gathered on the British American system is 4.35¢.

Combining the Madison and the British American systems, the total allocated cost of Repressuring is \$69,561.00, or less than 1/2¢ per MCF of gas sold by these two systems to the market.

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H. Zinder,  
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Q MR. McDONALD: Just in regard to the British American, Mr. Zinder, would you state the average cost per MCF sold from the British American system, I do not see that.

A The average cost of repressuring for the British American system per MCF of sales is 1.2 cents per MCF.

Q And that compares with ?

A That compares with the .24 cents per MCF for the Madison system.

Q Yes. Now Mr. Zinder, you were examined with respect to some of the principles applicable to the allocating of repressuring, have you a statement prepared as to that matter ?

A Yes.

MR. CHAMBERS: By the way, are you marking that last one ?

MR. McDONALD: Oh yes.

THE CHAIRMAN: That will be Exhibit 140.

SUBMISSION PRESENTED BY THE  
WITNESS HERE MARKED AS  
EXHIBIT 140.

Q MR. McDONALD: Yes, now you might continue.

A R E P R E S S U R I N G

It is elementary that the source of supply for gas marketing purposes must have two essential characteristics, namely, the ability to supply peak demand, and adequate reserves of gas sufficient to maintain the supply for the period necessary to amortize on a reasonable basis the equipment installed both for the purpose of supplying the gas to consumers and the equipment purchased by the consumers to utilize the gas.

This problem of maintaining an adequate reserve is one that has always been the concern of gas

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Dir. Exam. by Mr. McDonald.

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distributing companies, the consumers, and utility boards and commissions. In this Province the necessity of maintaining a reserve has been recognized in the past through allowances made in the rate base and operating expenses of the Gas Company set up under the terms of the Judgment of the Public Utility Commissioners, July 10th, 1931. In its reasons for judgment in respect to the Gas Company rate base, dated July 10th, 1931, the Alberta Board of Utility Commissioners stated; and now I quote:

"Bow Island Field.

The operation of repressuring the Bow Island Field represents a new investment which materially prolongs the period of usefulness of that field and the 16" pipe line laid from it, and both parties agreed as to the usefulness of the investment.

The Company proposes to spend \$145,000.00 during the coming year, of which \$130,000.00 is apportioned to Investment and \$15,000.00 to Operation.

The City suggests spending an indefinite amount forming part of a charge to "Burdett and Geological", totalling \$295,000.00 over a three year period, with \$125,000.00 of this in 1931.

The Board will assume that a specific amortization schedule will be set up covering all expenditures forming part of this repressuring programme with a life period of fifteen years and a tentative salvage value of 10%, the principal sum in this schedule to be made up as follows:-

|                                |                     |
|--------------------------------|---------------------|
| Expenditure to end of 1930     | \$192,018.85        |
| Estimated Investment, 1931     | 130,000.00          |
| Estimated Operating Cost, 1931 | 15,000.00           |
| "Burdett Field" to date        | 1,558.37            |
| Burdett Wells                  | 475.19              |
| TOTAL                          | <u>\$339,052.41</u> |

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All items of expenditure having no reclaimable material in the above schedule, such as "Estimated Operating Cost, 1931 \$15,000.00" shall be entered without deduction for salvage from the amount subject to amortization."

In approving the above expenditures of the Gas Company, all of which were made at the expense of the gas consumer, the Board of Public Utility Commissioners recognized a practice generally followed in the United States, namely, that gas companies and distributors be encouraged to maintain their reserves by leasing potentially productive areas and paying rentals thereon, to test potential areas and upon production being obtained to close the wells in and pay as a current operating expense deferred rentals and royalties in respect to the leases of the areas held in reserve.

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In a paper dealing with the "Effect of Recent Supreme Court Decisions on the Production and Conservation of Natural Gas", read at the Oklahoma City meeting, June 16th, 1945, of the Interstate Oil Compact Commission, Charles V. Shannon, General Counsel for the Federal Power Commission stated:

"Faced with a determination of the just and reasonable rates to be charged by the pipeline company for the gas which it produces, the Federal Power Commission has taken it for granted up to now that it should see to it that the company secures full reimbursement for all the costs, including a fair profit, it incurs in the process of acquiring and developing an adequate gas supply. The Commission's method, which follows the practices of the industry, may be briefly described. -----  
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In line with the foregoing, the Federal Power Commission has allowed as part of the pipeline company's rate base the actual investment which it has made in producing leaseholds and all the costs which it incurs in acquiring acreage for prospective production. The original bonus payment for the lease, as well as legal and other fees necessary to perfect title, etc., are included in the rate base. Delay rentals are also considered part of the investment if incurred within a reasonable period prior to the date operations begin. And in determining the pipeline company's operating expenses, the Commission allows all reasonable costs of production, including royalty payments, delay rentals after the operation stage is reached, exploration costs, and a fair return on



• History of the United States

1. The first group of people who are not in the labor force are those who are not in the labor force because they are not in the labor force.

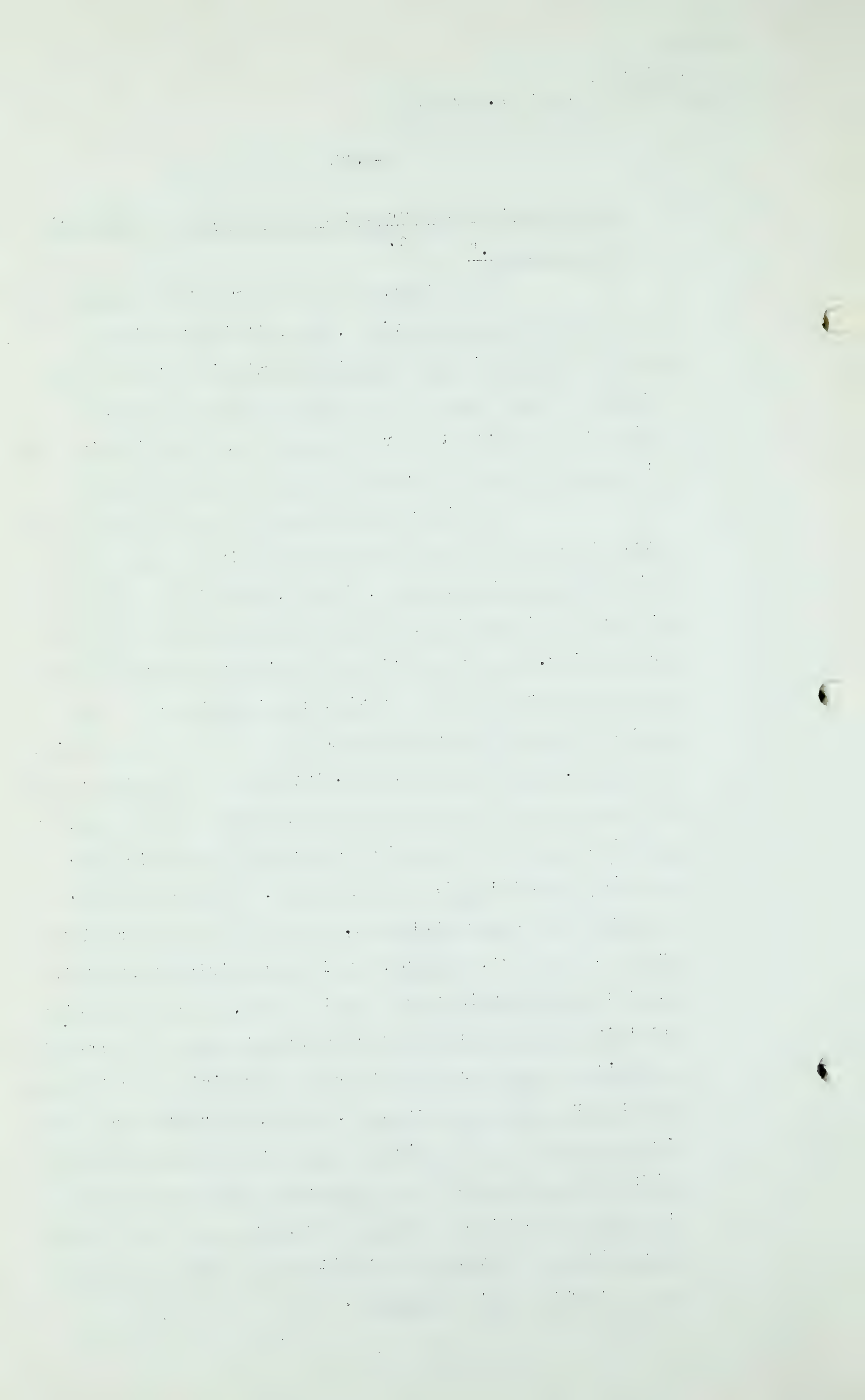
H. Zinder,  
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leaseholds held for future use as well as producing  
leaseholds."

It appears to me from these examples, and my own general observations, that it is practically a universal practice for Utility Commissions to permit the charging of the costs of maintaining adequate reserves either as a current operating expense, or capitalizing such investments as are necessary to maintain the reserves.

There has been some discussion and testimony on the record before this Board in this case dealing with the question of what, if any, benefits may be derived by the crude oil producers and the absorption plants from repressuring. In preparation for this statement with regard to repressuring, I have reviewed this evidence to some extent. There was considerable discussion as to possible benefits. I was particularly interested in trying to find any evidence which would either establish a measure of the possible benefits or indicate any manner in which such possible benefits might be measured. No such evidence apparently has been obtained, so far as I could read the record. In fact, although fully recognizing that it is a matter for determination by this Board, it is my opinion that the evidence does not conclusively show any appreciable benefits of repressuring other than providing for increased gas reserves for the consumer. Thus, there does not seem to be any basis upon which the situation in Turner Valley differs substantially from comparable situations wherein the costs of providing adequate reserves have been clearly recognized as a consumer benefit and the costs permitted to be charged to the consumer.





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Q MR. McDONALD: Mr. Zinder, you were questioned specifically I believe by Mr. Blanchard regarding absorption plant distribution of costs ?

A Yes.

Q Can you now answer his question ?

A Yes.

SUPPLEMENTARY STATEMENT OF H. ZINDER ON THE  
ALLOCATION OF COSTS OF GAS GATHERING BETWEEN  
THE ABSORPTION PLANT, MARKET, AND REPRESSURING

On my last appearance before this Board, I stated that I desired to give further consideration to the problem of what would be a proper basis for the allocation of costs of the gas gathering system as between the absorption plant, the market and repressuring. This arose in response to a question by Mr. Blanchard, who asked that since the absorption plant processed all the gas that was gathered in its plant, it therefore had the benefit of all of the gas and it therefore appeared this situation should be recognized in the allocation of costs. I had taken the position earlier on the record that the absorption plant actually used approximately 150 cubic feet out of every 1000 cubic feet of gas delivered to the plant. I had further taken the position that the allocation should be made on the demand and commodity basis, and illustrated how such a basis would work, which in this case meant that approximately 15% of gas gathering costs would be chargeable to the absorption plant operations. I further took the position that, in a sense, this was treating the absorption plant like a customer off the gathering system.

Since November 15, the date upon which this testimony took place, I have given considerable thought



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to the problem and to the view expressed or implied by Mr. Blanchard's question. I have also reviewed various decisions of commissions in the States particularly of the Federal Power Commission, for any light that such decisions might throw on the subject. My considered conclusion is that an allocation of costs as I outlined on the record on the demand and commodity basis is reasonable. There follows a brief statement of my reasoning for arriving at this conclusion.

There are two bases upon which costs may be allocated. For convenience, these might be designated as (1) the benefit basis and (2) the cost behaviour basis. Strictly speaking, I do not term the benefit basis an allocation of costs but rather a method for determining a distribution of costs. The distinction is a fine one and the difference is perhaps in the lack of precision possible under the benefit basis as well as in approach. Benefits to a large degree are frequently intangible factors not subject to ready measurement or to expression in terms of a common denominator.

It is true that the entire amount of gas gathered by the gathering system goes through the absorption plant, and the absorption plant strips all the gas; in which process, it actually uses up only 150 cubic feet out of every 1000 cubic feet of such gas. In processing all of the gas, it may be said that it is having the benefit of all of the gas. On the other hand, the size and operating characteristics of the plant are dictated by gas market demand requirements. This gives rise to certain material disadvantages in the profitableness of the plant which may be said in part or to wholly offset these benefits. Furthermore, the stripped gas is a better product for burning in the



• *Journal of the American Medical Association*, 1990; 263: 1033-1037.

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consumer's appliances than the raw gas as delivered from the wells. Thus, the processing itself may be said to be an additional offsetting benefit. In addition to the factors or benefits just mentioned, there may be many others enjoyed by the absorption plant and by the consumers as a result of the plant's operations. How any one can place a single yardstick to these benefits in any attempt to evaluate them is beyond my knowledge. It would have to be largely or entirely a judgment process. Finally, the results would be subject to possible considerable variation from time to time.

In the allocation of costs in the utility field, it has been my experience and observation that the benefit basis of cost allocation has seldom, if ever been used. For example, there has not been, to my knowledge, any serious effort or proposal that the costs of gas distributed the various classes of consumers in the retail market be allocated in relation to the benefits received by these various classes of consumers from this distribution system. It is obvious that benefits are not confined to mere uses. It is a much broader concept in my opinion. The results, if attempted, would undoubtedly give a very different rate structure than is now in use.

In the administration of the Natural Gas Act of the United States, the Federal Power Commission has taken into account and dealt with the problem of absorption plant operations, where such plants were owned by, or was an affiliate of, the natural gas company. Briefly, it may be stated that its treatment of the absorption plant operation is in the nature of a by-product operation. It determines the costs of such operations on a utility regulatory

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basis, allows the regulatory return upon the investment and credits all the profits in excess of the allowable return to the cost of the production or utility operations. In determining the costs of gas to the absorption plant, gathering costs are included. In no case handled by the Federal Power Commission has there been any allocation of these gathering costs to the absorption plant on the basis of benefits and certainly not on the basis of considering that the absorption plant uses the entire volume of gas handled by the gathering system, and from there go into the question of benefits. It has practically and uniformly determined an average gathering cost per M.C.F. of gas handled which, when added to the costs of production represent the cost of gas to the absorption plant for the volume of gas actually used in that plant. This is essentially the basis of allocation which I have suggested here. Except in Alberta, the problem of crediting any earnings, if there are any, in excess of an allowable rate of return from absorption plant operations to other remaining costs, is not present, since the absorption plant has been excluded from regulation.

No question has ever arisen with respect to the basic method of allocation in the gathering system as used by the Federal Power Commission. Certainly none to my knowledge. Certainly there has been no suggestion of use of the benefit theory basis of allocation.

It is my information that the gas gathering system, that is the Madison gas gathering system, was designed and built of such size and capacity as to handle the market demand for gas. An allowance had to be made in this design for the capacity that would be absorbed by the



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absorption plant, which is approximately an additional 15%.

I think it is fair, therefore, to charge such gathering costs that are essentially proportionate to the capacity of the system to each use in proportion to their responsibility for the capacity which, in this case, is approximately 15%. I think it is further fair to charge the absorption plant with such part of the operation costs as are proportional to the volume of gas pumped as the volume of gas actually used up in the absorption plant bears to the total volume of gas handled up to that point.

Q MR. McDONALD: Now in the Schedules "A" and "B" to the Exhibit that you read, 140, you applied this principle of allocation ?

A Yes. I might point out that on Schedule "A" using the method of allocation I have just described gives a cost to the absorption plant for the Madison system of \$48,950.00. That would represent their share of the gas gathering system costs using as I said earlier their own figures with respect to costs and rate of return. For the British American system the amount allocated to the absorption plant is \$23,320.00. I would like to add here for the record that when I was last here my information was that the amount of shrinkage and fuel used up in the absorption plant was approximately 15%. It was a figure I found being used here and one frequently used in the States. In gathering together these figures it was necessary to get an accurate figure and I found that the amount for shrinkage and fuel is roughly about 10% or was in 1945 so I used the  $9\frac{1}{2}\%$  which was the figure introduced by the Madison Company for their system and 10% which is the



1. *Phragmites australis* (Cav.) Trin. ex Steud.

| Age Group | Percentage of Respondents |
|-----------|---------------------------|
| 18-29     | 85%                       |
| 30-49     | 80%                       |
| 50-69     | 75%                       |
| 70+       | 65%                       |

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estimate made for the British American system. That estimate was based upon information I had obtained from the British American Company.

MR. McDONALD: That is all.

( Go to Page 5228 )

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H. Zinder,  
Cross-Exam. by Mr. Steer.

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THE CHAIRMAN:

All right, who is first?

CROSS-EXAMINATION BY MR. STEER

- Q Mr. Zinder, one of the last statements you made was this, I think, that in your view costs of operations should be apportioned on the basis of the amount of gas pumped; did you say that? We have not the advantage, you see, of having this memorandum with us.
- A Operating costs, exclusive of return, taxes and depreciation, yes.
- Q Should be charged on the basis of the quantities of gas pumped, is that what you said? Perhaps you will read the sentence again?
- A Yes, all right. Proportionate to the volume of gas pumped as the volume of gas actually used.
- Q Perhaps you will be good enough to read the whole sentence.
- A "I think it is further fair to charge the absorption plant with such part of the operation costs as are proportional to the volume of gas pumped as the volume of gas actually used up in the absorption plant bears to the total volume of gas handled up to that point."
- Q Yes. So that your principle is that the operating costs ought to be borne by the absorption plant in proportion to the amount pumped into the absorption plant for the uses of that plant?
- A No.
- Q You do not say that?
- A No. My theory, or principle, Mr. Steer, is that - here is a total volume of gas.....
- Q I am not asking you that at all. I understand your theory, and I am coming to that in a moment?
- A All right.



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Cross-Exam.by Mr.Steer.

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Q I want to get this principle of yours for the allocation of those costs.

MR. McDONALD: Just a moment, Mr. Chairman. Will you please let the witness answer the question?

MR. STEER: Perhaps the Chairman will tell me about that.

MR. McDONALD: I am objecting to that type of cross-examination.

MR. STEER: Well, make your objection to the Chairman, and he will rule whether I am cross-examining properly or not.

Q THE CHAIRMAN: Is there something that is not clear, Mr.Zinder?

A I answered Mr. Steer's statement, that is, the statement of what he thought my theory was, was wrong. I was trying to elaborate what my principle was.

Q All right, go ahead and do that?

A I would like to simply say briefly, that operating costs be allocated proportionately to total volume. I would like to say that.

Q Total volume pumped?

A Total volume handled in the system.

Q MR. BLANCHARD: The total volume handled in what?

A Handled in the system,

Q MR. STEER: I wonder if I could trouble you to read that sentence of yours again?

A "I think it is further fair to charge the absorption plant with such part of the operation costs as are proportional to the volume of gas pumped as the volume of gas actually used up in the absorption plant bears to the total volume of gas handled up to that point."





H. Zinder,  
Cross-Exam. by Mr. Steer.

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MR. CHAMBERS.

I wonder if the witness would read it more slowly. We would all like to get it.

A I am sorry. "I think it is further fair to charge the absorption plant with such part of the operation costs as are proportional" .....

THE CHAIRMAN:

Just a minute. Wait until somebody says yes. Better stop there now. All right, Mr. Zinder.

A "..... to the volume of gas pumped as the volume of gas actually used up in the absorption plant bears to the total volume of gas handled up to that point."

Q MR. STEER:

It is fair to charge the absorption plant with such portion of the operating costs as are proportionate to the volume of gas pumped. Then after the word "pumped" you go on to say, "as the volume of gas actually used up in the absorption plant bears to the total volume of gas handled up to that point", is that right?

A Yes, that is the statement.

Q I found it rather difficult to follow that sentence.

A Well, maybe I will try to make a further explanation.

THE CHAIRMAN:

If you will illustrate it by hypothetical figures?

A Yes. Let us take the example that I have. Turning to Schedule A, Sheet 3, of Exhibit 140.

Q MR. CHAMBERS:

You are talking of Exhibit 140 are you?

A Yes, that is right. There the total volumetric costs are \$211,454.00, and I am saying that those costs which are comprised of three subdivisions principally, or entirely, rather, entirely, labelled Direct Expenses, Administration and General and Contingencies. I call those three items operating costs that are proportional with the volume of





H.Zindor,  
Cross-Exam.by Mr.Steer.

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business. You can call it the volume of business, the total amount of gas and the amount flowing through the system. I say that those costs are substantially proportional to the volume. If the volume is greater those costs will go up, if the volume is less those costs will go down, that is, in the main. So that I have taken this total cost of \$211,454.00 and I have distributed between the absorption plant, the market and the repressuring in proportion to the percentages shown under each,  $9\frac{1}{2}$ , 81.9 and 8.6. Those percentages you will find turning to Sheet 4 of Schedule A, represent each one's proportionate part of the total volume of gas handled, up to the absorption plant. The total gas to the absorption plant I use as 100% was 14,810,000 MCF. The amount repressured in 1,276,085, and that is 8.6%. The sales were 12,127,101, or represent 81.9% of that total. And the shrinkage and fuel represent 1,406,929, or  $9\frac{1}{2}$ %. Combining them they total the 100%. I wonder if that explains what I have done.

Q MR. STEER: I understand all that. I understood that yesterday?

A I see.

Q But what I am wondering about is this proposition of yours that you charge the absorption plant with operating costs that are proportionate to the volume of gas pumped, and I find it difficult to understand the bearing of the latter part of that sentence to the former. But I am going to put this to you?

A Yes.

Q You have got three absorption plants?

A Yes.

Q You have got no market for residue gas?



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A Yes.

Q And you have got one gathering system, and that gathering system delivers into those absorption plants the wet gas, 20% to one, 40% to another and 40% to another. Do you follow me?

A Yes.

Q Now, your proposition there is, and we have got no market for the residue gas, this residue gas is flared, your proposition is that those gathering costs ought to be borne in proportion, 20, 40 and 40?

A Yes.

Q Because 20% of the quantity gathered is delivered to one absorption plant, 40% to another and 40% to the other?

A Well, let me think about that for a moment, Mr. Steer. Three absorption plants. One uses 40, the other 40 and the other 20% of the total volume of gas. The residue is completely flared and there is no market. I am assuming that the amount of shrinkage in each plant will be the same. I would say yes. My answer would still be yes.

Q What bearing has the amount of shrinkage in the plants?

A Well, since there is no other use made of the gas, it would not have any bearing on that example.

Q I see. Now, that is the principle which you have stated?

A Yes.

Q Very well. Now, you say that principle is not applicable to the situation of the Madison and the B.A. absorption plants for the reason that there is a market now for the residue gas?

A Yes.

Q And the reason you say that the situations are different by reason of the market for the residue gas, is that you say



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that in these absorption plants there is a certain percentage of the original volume of the gas that is consumed, if you like, that is used, and it is not going out with the residue?

A That is right.

Q Yes. That is not quite true, is it? Isn't it the case that the gas that goes out in that residue gas stream is an entirely different thing from the gas that enters the absorption plant?

A It has a different constituency.

Q Yes, certainly it has. Now, isn't this true, we will take one cubic foot of gas, if you can conceive it passing through the plant. That absorption plant treats that one cubic foot of gas, it processes it as a unit of raw material, is that right?

A Yes.

Q Yes. And out of that unit of raw material it takes, as you have said, certain constituents, and in order to get the constituents it requires, it has got to treat every cubic foot of gas that goes in?

A Yes.

Q And if you analyze chemically the gas that emerges, you have got an entirely different thing from the gas that went in?

A It is different.

Q Is it entirely different?

A Well, methane is still a substantial part of the product that went in, and a substantial part of the product that went out, but it is different. The hydrocarbons have been taken out.

Q Yes. What has been taken out, the constituents that are taken out, they are all removed?





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A Yes.

Q In an up-to-date process?

A Yes.

Q Now, the constituents that were removed, we call them commonly wet gasoline or naphtha, is that right?

A Yes.

Q And the process being efficient, there is not any wet gas or naphtha in the product that emerges?

A I could not say 100% that is true, I will assume that is so.

Q Now that situation is an entirely different situation from the one I first put to you, is it not?

A No. The first proposition you put to me, Mr. Steer, was that the absorption plant operated, I assume the same thing in both cases, the only difference being between the two was in the one case the gas went to the market and in the other case it was flared, as I understand it.

Q That is right?

A All right.

Q Now, you said in the case I first put to you, 20, 40 and 40, that you simply charged it on the basis of the volume used?

A Yes.

Q The volume that goes in, is that right?

A That is right.

Q That is right?

A Yes.

Q And the reason why you do not charge them on the basis of the volume that goes in in the second case is because they have got a market for the residue.

A Well there is a difference. That is right.



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Q That is right?

A Yes. In other words, if I might say this, in your first case, you might allocate your costs the same way, but you would not have anybody to charge them to since it is going to the air.

Q Oh yes. Now then, I want you to put your mind on the British American Absorption plant before the transmission line was constructed to lead this residue up to it?

A Yes.

Q And there is an absorption plant that is operating and flaring the gas?

A Yes.

Q Now, I ask you whether the wet gas that enters that absorption plant is that plant's raw material?

A Yes.

Q Every foot of which is required for the plant?

A Yes.

Q And every foot of which emerges from the plant as a different thing from what it went into the plant as?

A Yes.

(Go to Page 5236 )



1. The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

2. In the second part, we shall consider the question of the influence of the external magnetic field on the structure of the atom.

3. The third part of the paper is devoted to a discussion of the question of the influence of the external electric field on the structure of the atom.

4. In the fourth part, we shall consider the question of the influence of the external magnetic field on the structure of the atom.

5. The fifth part of the paper is devoted to a discussion of the question of the influence of the external electric field on the structure of the atom.

6. In the sixth part, we shall consider the question of the influence of the external magnetic field on the structure of the atom.

7. The seventh part of the paper is devoted to a discussion of the question of the influence of the external electric field on the structure of the atom.

(The end of the paper)

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Q Now that plant could not operate without every foot of that gas in its wet state, could it?

A That is right.

Q Then we add the residue market so that the residue gas is sold?

A Yes.

Q That is all we do?

A That is right.

Q And now you say that because the British American Company has been fortunate enough to find a market for its residue gas that instead of 100% of the operating costs of that plant being charged to it, you are going to charge 10. That is gathering and compression to get the gas into the plant, that is your proposition?

A That is right.

THE CHAIRMAN: Mr. Fenerty?

.....

CROSS-EXAMINATION OF THE SAME WITNESS BY MR. FENERTY.

Q I would like to ask a couple of questions just dealing with that proposition, because the British American Company is fortunate enough to now find a market for its residue gas, you would charge on the volumetric basis 15% and 85%. 15% we will say to the Absorption Plant, if that is the percentage, and 85%.

A Yes.

Q And that works out, of course, that the absorption industry gets a very substantial benefit over that which it previously enjoyed by reason of this conservation scheme, does it not?

A Yes, on that basis.





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Q What is that?

A Yes, it gets a benefit but as I stated in my statement, Mr. Fenerty, there are all sorts of benefits, one way or another and there may be more than those that I even know about.

Q Yes, there are some that you do not know but the ones you know about you allocate a benefit of 85% to the Absorption Plant. You allocate 85% of those benefits to the Absorption Plant, tell me whether you do or not and we will go on to something else. Do you or don't you?

A Now . . . . .

Q I am going to get a direct answer on something.

A I cannot answer that question.

Q If you cannot answer that then we will go on to something else.

A Can I state, Mr. Chairman, why I cannot?

THE CHAIRMAN: Yes.

A Because you have used benefits and costs synonymously in the same question. Now if you would limit your question, Mr. Fenerty, that I have allocated 85% of the costs I would answer it "yes".

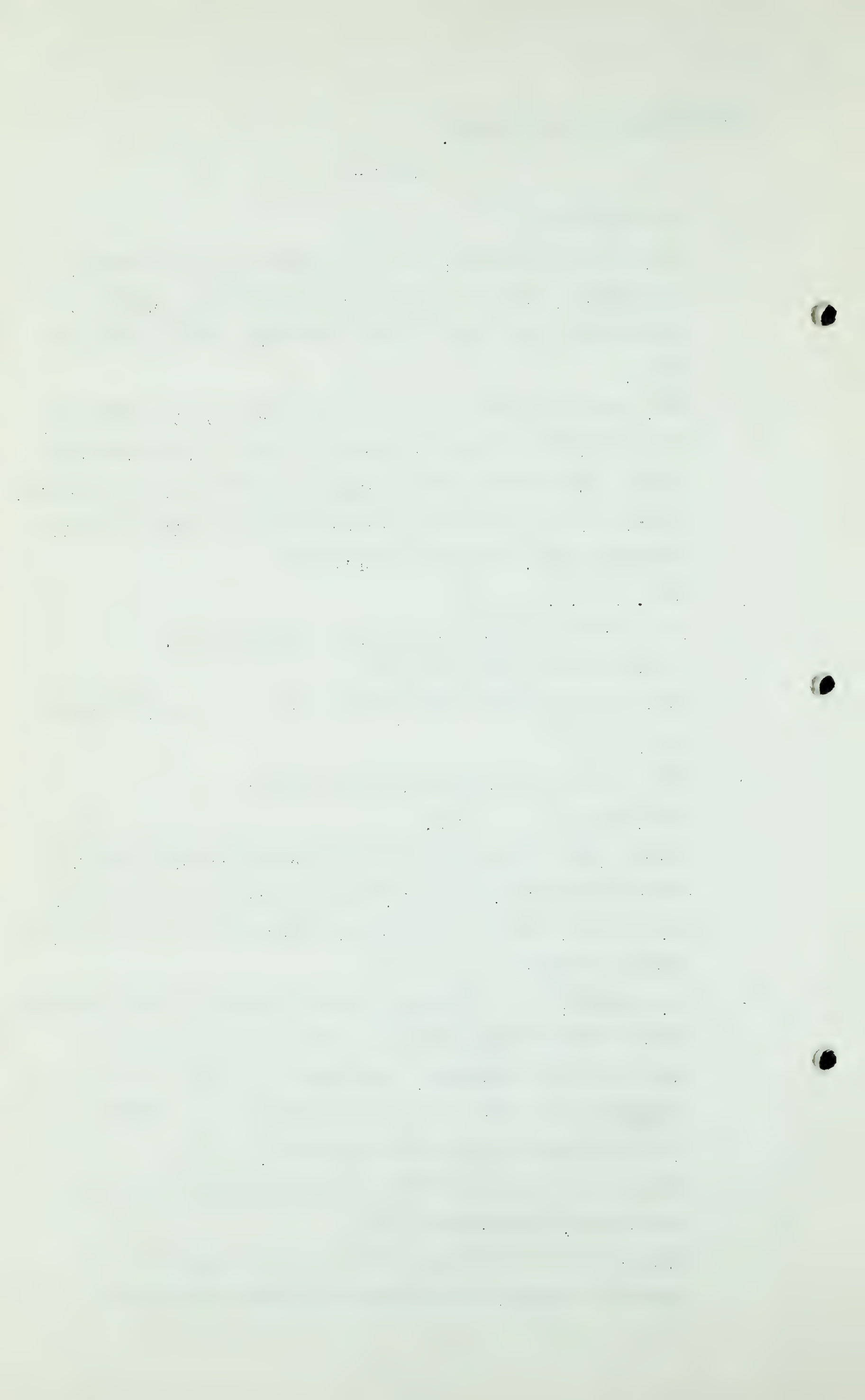
Q MR. FENERTY: Then you give a benefit to the Absorption Plant of 85% of the costs, is that a fair statement?

A That is a fair statement. My answer is "yes" on the assumption that prior to this time there was no market at all for residue gas that was flared.

Q You know that is so with the British American don't you?

A With the British American, yes.

Q Then with the British American Plant you propose to allocate a benefit to the extent of 85% of the costs



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as a result of this conservation scheme?

A Yes.

Q Of absorption.

A No, 85% goes to the market and repressuring and 15% to the Absorption Plant.

Q No. Mr. Zinder, I think I am right, I was reading from Mr. McDonald's notes and I think you said in effect that you saw no difference between the costs of repressuring and the costs of maintaining reserves as far as the way those should be charged.

A That is right. My statement generally was that repressuring was for the purpose of increasing the length of the life of the field and making greater reserves available.

Q "It appears to me from these examples, and my own general observations, that it is practically a universal practice for Utility Commissions to permit the charging of the costs of maintaining adequate reserves either as a current operating expense, or capitalizing such investments as are necessary to maintain the reserves." I think you did say in one place that you saw no difference.

A That is right.

Q I suggest to you what we have here in repressuring is the cost of preventing the dissipation of the reserves.

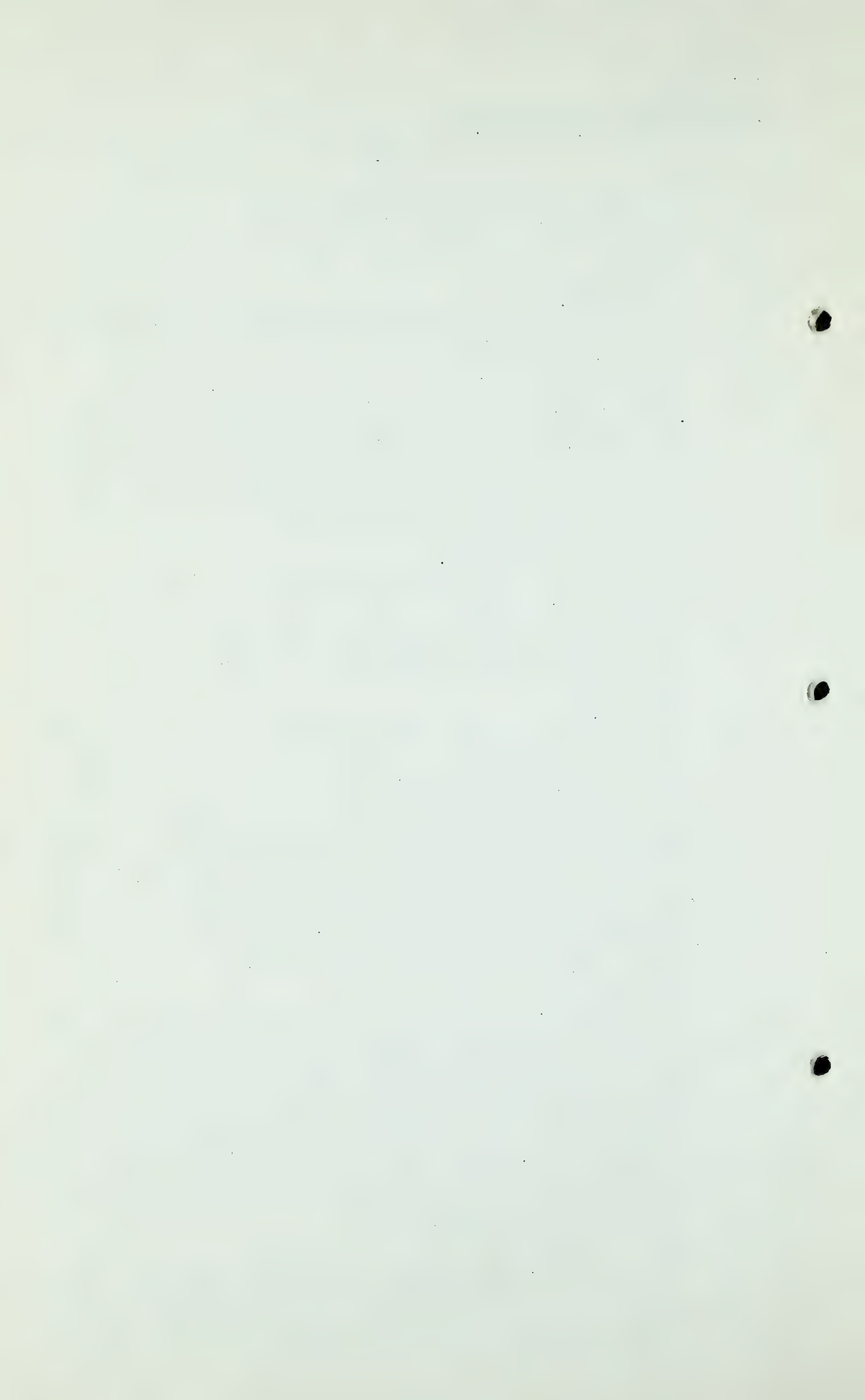
A Yes, I expect that is the other side of the problem.

Q You treat that, the production of gas and putting it back into the ground in the same way as the development costs of new gas wells?

A That is right.

Q Then you also said, I think, that were no benefits, you saw no benefit to anyone other than the consumer from the





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repressuring. Did you not in effect say that? I am more or less handicapped without having a copy of this exhibit. This is at the bottom of page 3.

A My statement was this, Mr. Fenerty: "In fact, although fully recognizing that it is a matter for determination by this Board, it is my opinion that the evidence does not conclusively show any appreciable benefit of repressuring other than providing for increased gas reserves for the consumer."

Q Yes, that is what I had in mind.

A Yes.

Q Now do you remember when you were here before and I was putting to you the suggestion that an offer of gas from another field at present prices might under certain circumstances such as adequate reserves and so on, mark the upper limit that could be charged here and I think you told me yes except for the matter of government policy. Do you remember that?

A Yes, I remember the general question.

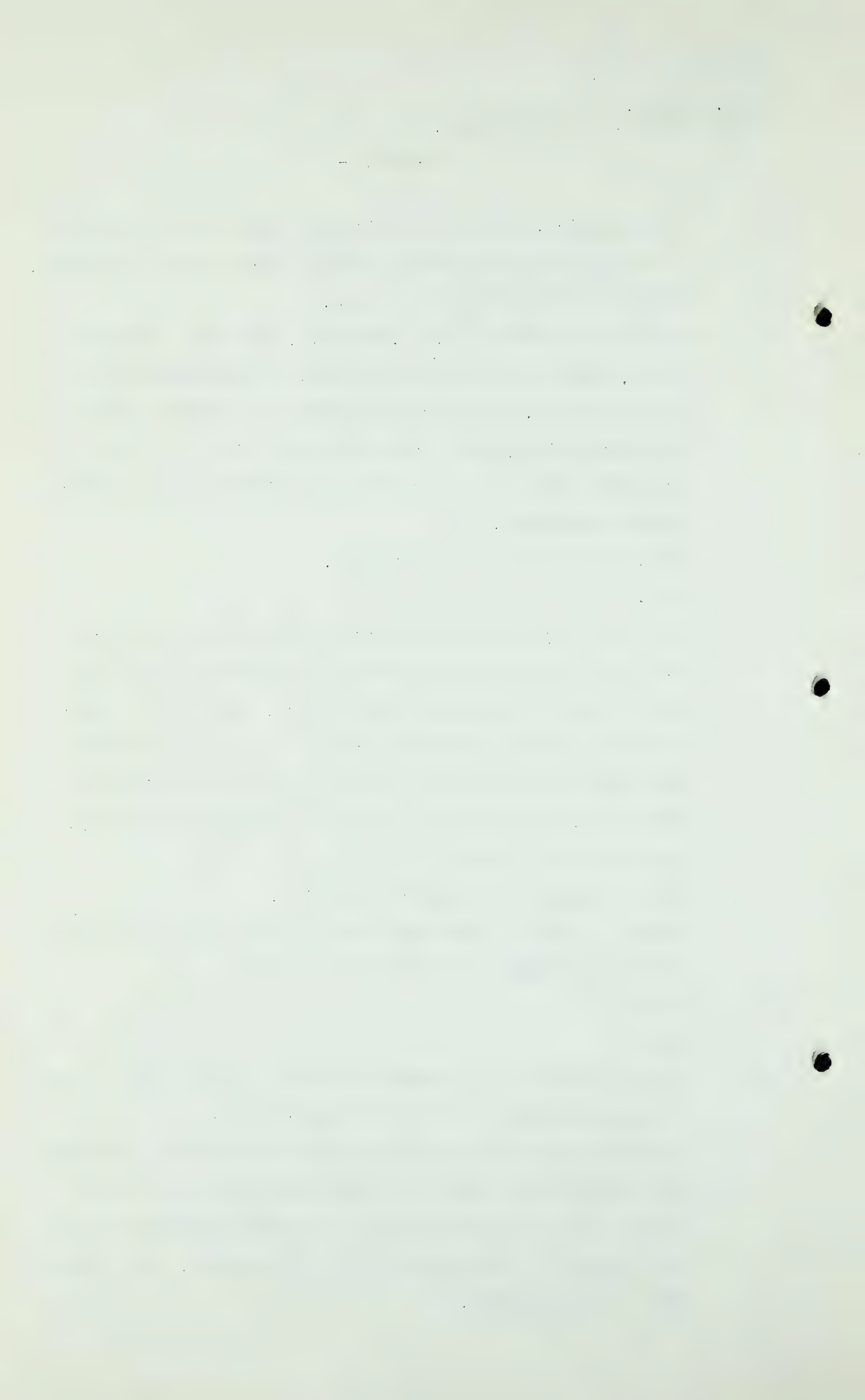
Q So that I take it from that that you do regard government policy as perhaps the controlling factor?

A Oh yes.

Q Yes.

A I might elaborate. Government policy as expressed in terms of Statutes must be the controlling factor.

Q I want you to assume for the moment that we have a government policy which will not permit the blowing off into the air and the burning of gas that can be otherwise dealt with either by repressuring or by the market. Just assume that for the moment.





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A Yes.

Q I suggest to you that if we have such a government policy that the sole benefit received from repressuring is by the oil operator as far as oil wells are concerned. Would you agree with that?

A No.

Q Would you agree then if we have a policy which does not permit the blowing off of residue gas from oil wells into the air?

A Yes.

Q That under the system of operating oil wells as far as you know in Turner Valley, that they have either to repressure it or sell it or you cannot operate the well, is that the situation we have here?

MR. McDONALD: Are you suggesting that is the situation in Turner Valley?

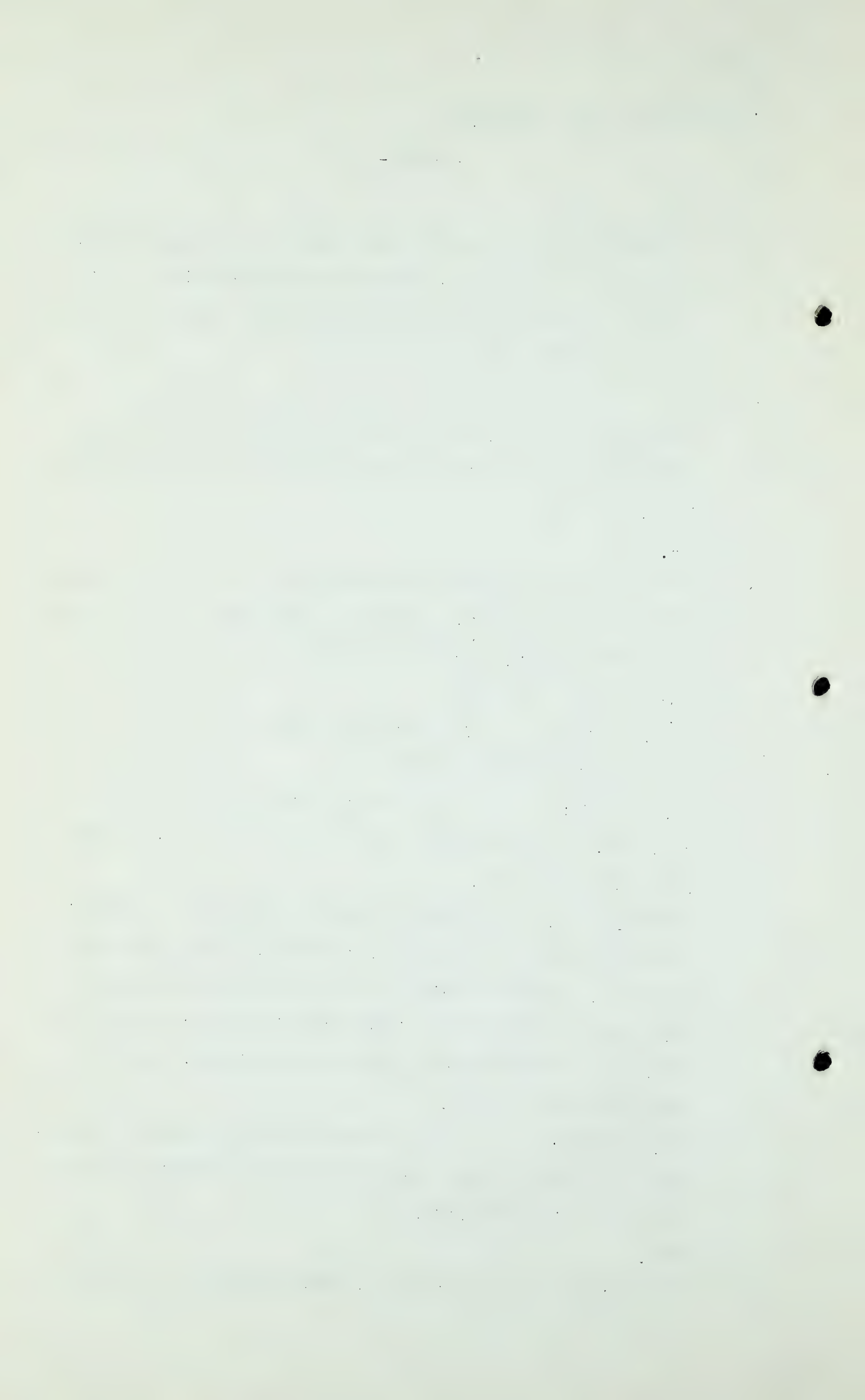
MR. FENERTY: I am asking whether he knows that or not, yes. I do not know what he knows about it. I know what you and I know.

THE CHAIRMAN: I think you are asking the witness a question which you should ask a geologist or a petroleum engineer. I am not going to stop you but I do suggest that you are asking Mr. Zinder questions which should be asked of a geologist or a petroleum engineer. Now I am not going to stop you.

Q MR. FENERTY: I will try and put it a little better. Assume if you will that crude oil wells in Turner Valley operate with a gas lift.

A Yes.

Q Under quite a heavy gas head. None of them are pumping



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Cross-Exam. by Mr. Fenerty.

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propositions. They operate with a gas lift. I am asking you to assume that it is not possible to produce oil from those wells without also producing gas.

A Right.

Q Which goes into the gathering lines downstream from the Separator.

A Yes.

Q With that assumption I want to ask you whether or not the oil operator is the only one that receives immediate benefits from repressuring if there is no market for the residue gas. Assuming further it is a government policy to prevent the gas being blown off into the air.

A Let us see if I have your question straight.

Q All right.

A You want me to assume that oil is lifted by the gas in the oil well?

Q Yes.

A And then it is government policy that that gas, having performed that function, cannot be flared?

Q Yes.

A But must be conserved or repressured?

Q Yes, or sold.

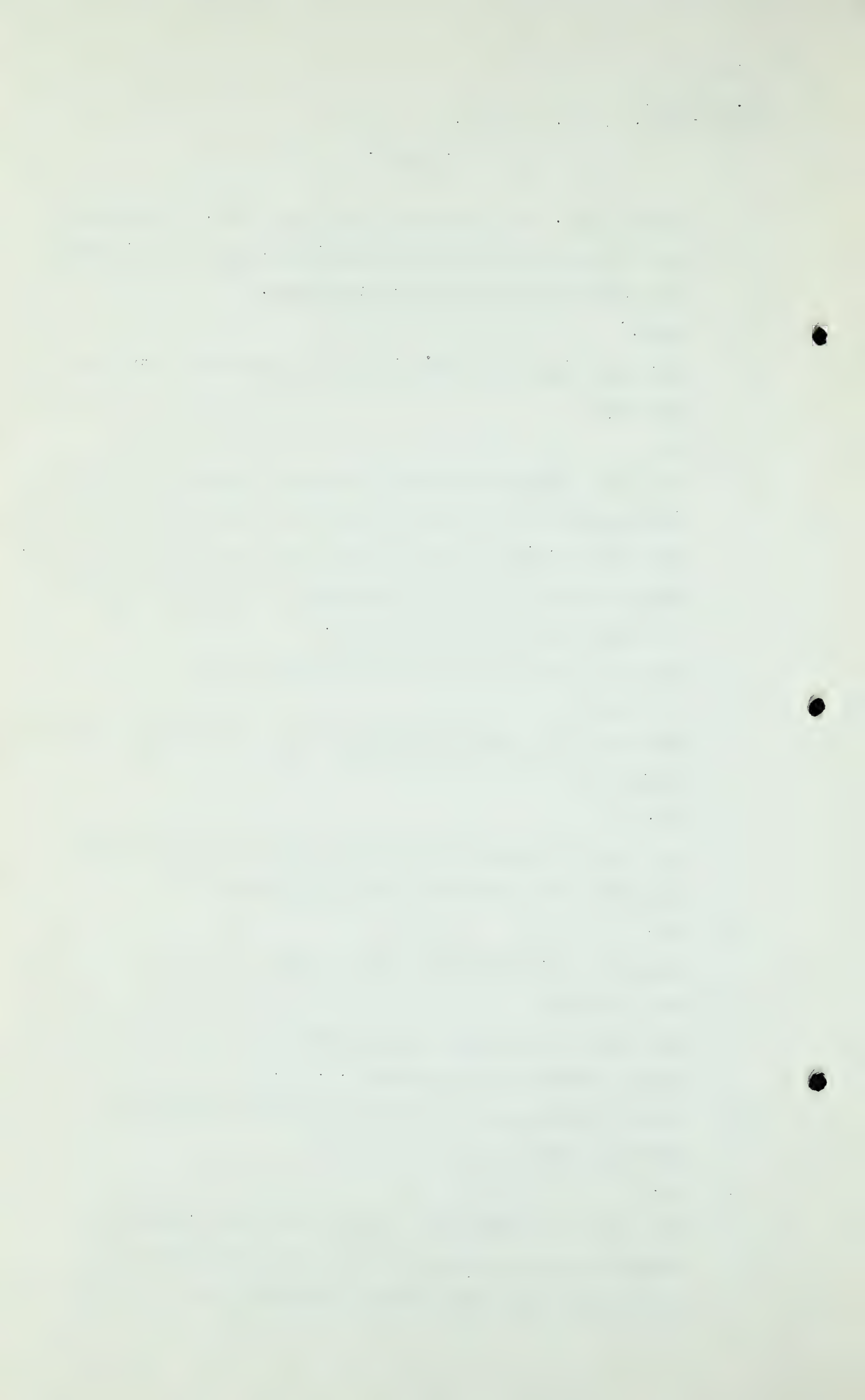
A With these assumptions your question is - can I get it again - does the oil operator . . . . .

Q Is the oil operator the one who gets the benefit of repressuring?

A No.

Q Now let us see why not. As far as the gas consumer is concerned you will agree with me the best place in the world to keep his gas reserves is to keep them in the





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Cross-Exam. by Mr. Fenerty.

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ground where they are?

A Yes.

Q That is what you do with an ordinary gas field is it not?

A Yes.

Q You do not have this repressuring problem because you just keep it there and use it as you want it.

A Yes.

Q Now making those assumptions I ask you to make, if you do not repressure and you have not got a market, you cannot operate your oil well can you?

A I see, that is right. If you cannot operate your oil well which under your assumption - I am sorry - that is right, you cannot do, it has the effect that the oil operator having a market for the gas, the oil operator can operate his well.

Q Yes.

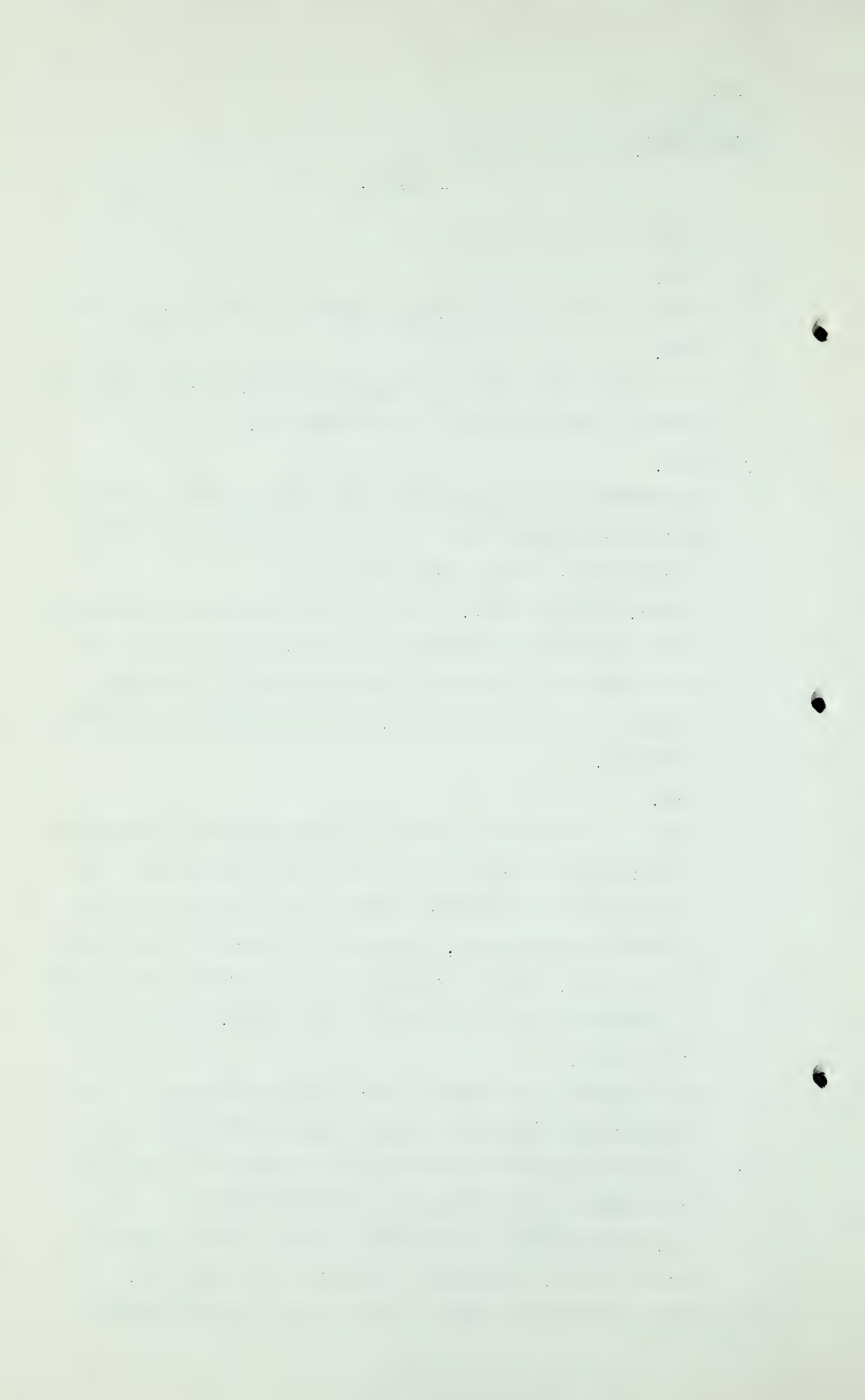
A Then he receives the benefit of being able to operate his well whereas he could not before. And then you get into the question of the time factor. That is he is going to operate his well over, let us say, 20 years on that basis or 50 years, whatever it might take to get all his oil out as compared with, if he were a free agent, of doing it say in 5 years.

Q He is getting the benefit from repressuring isn't he and the only benefit, if he cannot blow it off in the air?

A If you would call that a benefit of getting his gas out in a shorter period instead of a longer period.

Q No, he is getting the benefit of being able to operate his oil well, if he cannot blow it off in the air.

A Yes. He could not operate his oil well at all on the





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other basis.

Q So that if there is a controlling government policy which will not permit the blowing off into the air of this residue gas, I say to you again the oil operator is the only one that gets any benefit from the repressuring. That is logical.

THE CHAIRMAN: He may say so if he wishes, but I have other views.

MR. FENERTY: I think there is room for some logical conclusions in this Inquiry.

MR. McDONALD: You are making the assumption that if  
. . . .

MR. FENERTY: If he is not permitted to blow the gas off in the air certainly.

A Well I would say, Mr. Fenerty, that the oil operator certainly gets the benefit but there is no denying that the market gets a benefit too.

Q Any more benefit than if the gas had been left in the ground?

A No, no more than if it had been - now one moment - left in the ground?

Q Yes.

A Well of course gas in the ground is of no use to the market till it is produced.

Q You and I are here to discuss this thing quite frankly and not from any one point of view.

A I am trying to answer your questions.

Q If the consumer does not get any more benefit than if it was left in the ground then on this other assumption the oil operator gets the full benefit of repressuring doesn't he?

A Yes.



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Q Thank you.

A That is the way it seems to me.

Q And your assumptions that the benefits were obtained by the consumer were on the basis that the oil operator could operate and that he would take and blow his gas off in the air if he did not have any market for it, were they not? They must have been.

A Mr. Fenerty, with respect to my assumptions as to the benefits of repressuring as against not repressuring and so forth, my statement was simply this that I did go over and read the testimony before the Board. I do not want to presume to reach a conclusion that the Board is required to reach but I am simply stating that in my reading of that testimony, I did try to find some conclusive statements as to what the benefits would be one way and another.

Q Yes.

Whether they could be measured and what the measurements would be.

Q Yes.

A I am only saying that in reading the testimony of the experts that have been before this Board, I did not find anything which showed conclusively that there was anything other than essentially providing this gas for the market that would otherwise be flared. That is really what I am saying.

Q I understand and you are finding out in the process of examination that there may be an entirely different picture.

A Well I do not want to . . . . I would like to say this rather, I am not a geologist and what benefits might come





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from repressuring and so forth, I am not presuming to testify on.

Q But these general observations are not of benefit here unless they are capable of application to our peculiar problems are they?

A I would say that is right.

Q What?

A That is right.

Q That is right, yes. Now then, one thing more on the question I asked you a minute ago. Your idea is, is it not, that the consumer gets those benefits because if it was not repressured it would be blown off in the air, is that not your idea?

A That is right.

Q And be wasted, and it follows from that, I take it, that you are assuming that this oil operation would continue without anything being done with the residue gas. Just a waste product of the oil operation.

A That is right.

Q As far as you are concerned, that is your position in saying the consumer would get the benefit, it is still just a waste product of the oil operation. That must follow, that is your way of treating it is it not?

A It is a by-product of the . . . . . You might say on that reasoning, it is a product which formerly was a waste product and now has been put to some usefulness and I think I answered that before.

Q Yes, I think so.

A That adds value to it, as I stated the last time I was here.

Q When I asked you yesterday whether or not this suggestion





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that the costs at the well head should be determined by the uses to which the gas was put, you said that was not a new theory.

A That was not a new theory?

Q No.

A That is right.

Q Am I right in saying that is another way of saying that these prices should be determined by the benefits received by the various consumers?

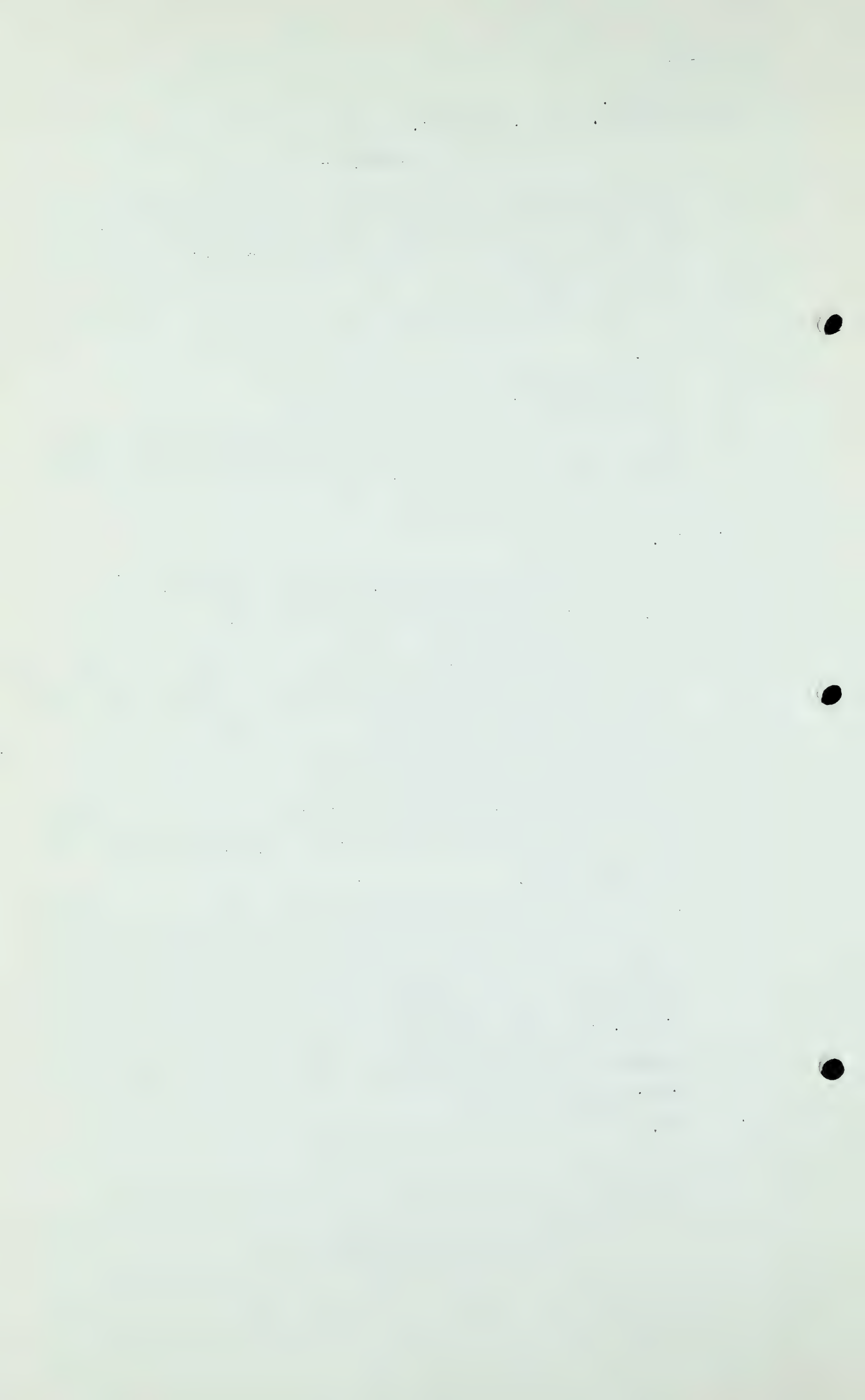
A No.

Q That is not the same thing, benefits received?

A No. I think with regard to the allocation of costs and benefits, it may be you can go into the question of benefits to determine whether or not for example repressuring ought or the Absorption Plant ought to be charged any costs at all. Then having determined as to whether you are going, as a matter of policy, to charge them anything at all, then you come to the problem of allocating those costs between the different uses.

Q I am now directing your attention to what we were talking about yesterday. You did tell me that this theory of yours of allocating or of charging at the well head per 1000 feet of gas, the price should be determined on how it was used, whether it was in a furnace in a house or the Burns plant, didn't you?

A Yes.



C-2-1 10.55 a.m.

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Q And that was not a new theory?

A That is right.

Q Now I suggest to you that that change in prices there is based on the benefit that each of these consumers get, they pay more because they get more benefit, is that not it?

A Well I do not know.

Q I am wondering whether it is the same thing?

A I would not say so, no.

Q The reason I ask you that is because you have told us today that this theory of yours with reference to gathering gas in proportion to the benefits received, is something new, is it not?

A I said, - I do not think it is something new, Mr. Fenerty, I say I have not seen it used any place.

Q But you have seen used the determination of price at the well head based on the uses it is put to?

A No, I have not seen that used.

Q Oh then, there is no inconsistency?

A All right.

Q I mean that has been thought about more than perhaps this last theory, is that right, but it has not been used, neither of these have been used?

A The benefit theory of allocating costs of a gathering system or distribution system has never been used to my knowledge. Neither has the system of determining the well head price based upon the value of the service in the market been used.

Q I will put it this way, neither of them have been used but one of them has been advocated by you?

A One of them has been advocated by me in only this sense, Mr. Fenerty, I say it is worthy of consideration and examination to determine what would be the upper limits of such





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value.

MR.FENERTY: Thank you.

.....

MR. STEER: May I ask one question which I  
omitted, Sir?

THE COURT: Yes.

.....

CROSS-EXAMINATION BY MR. STEER Cont'd.

Q I think you were talking about the decision of the Federal  
Power Company in the Hope case, Mr.Zinder?

A I did not mention the Hope case this morning.

Q But you were talking about that decision, were you not, when  
you were dealing with the treatment of the allocation of  
costs as between the gasoline plant and the absorption  
plant?

A No. I had in mind, Mr.Steer, more than one case. There was  
the Hope case, the Canadian Rivers Gas Company case, the  
Panhandle Eastern Pipeline Company case and a number of  
others.

Q I know all that?

A Yes.

MR. McDONALD: Now just a minute, are there any  
other cases? Will you let the witness finish his answer?

MR. STEER: I did not interrupt him.

THE CHAIRMAN: And he said "And a number of others."  
He finished up by saying "and a number of others".

MR. McDONALD: Mr. Chairman, I object. Both Mr.  
Fenerty and Mr.Steer have been interrupting this witness  
and not letting him finish his answers. When he has finished  
his answer, then let us hear the next question. This is

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continually being done.

MR. STEER: Thank you very much.

THE CHAIRMAN: I fail to see why this witness, -  
he is being treated with more heat than any other witness  
that we have had. He has been cross-examined on subjects  
on which he did not give evidence, and on which I do not  
think he is qualified to give evidence, but being a most  
obliging person, he has tried to answer the questions, and  
then he has been cross-examined with some heat. Now that  
is exactly the position. Now in his last statement, Mr.  
Zinder said he thought of a number of cases which he knew of  
"and many others", and Mr.Steer said "I know them all".  
Now just go on from there.

Q MR. STEER: And I asked you to give your  
attention to the Hope case, which I intended to do in my  
first question?

A All right.

Q And I suggest to you that the absorption plant that was in  
question in the Hope case was not under the control of the  
Commission?

A The gasoline, the absorption plant, was not regulated, no.

Q Yes.Consequently you were dealing with an absorption plant  
which was not regulated and you were dealing with a gas industry  
that was regulated under the Federal Power Commission?

A Yes.

Q Yes, and I understand that the decision of the Federal Power  
Commission was upheld in the Supreme Court of the United States?

A Yes.

Q And the treatment which was given to the absorption plant  
in that case was to take all the profits, over and above the





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allowed rate of return on the natural gas line, and credit those profits to the natural gas industry?

A That is right.

MR. STEER:

Thank you.

.....

CROSS-EXAMINATION BY MR. CHAMBERS

Q Mr. Zinder, my understanding of the situation in the Hope case is this, that the Hope Natural Gas Company, which was an utility subject to regulation by the Federal Power Commission, owned all the gas, including the gasoline content ; now if you want to refer to this, I have the report here, (Document handed to witness).

Mr. Zinder, probably we will save some time.....

A Yes.

Q .....if I will leave that until later?

A All right.

Q And for the purposes of the record, to keep it in mind, what I want to direct your attention to.....

A Yes.

Q And I am asking you to verify it, is that in the Hope case the regulated company produced a large part of the gas in its open wells?

A That is right.

Q And it then purchased the balance under contract from other well owners so that the Hope Company, that was subject to regulation, owned at the well head the gasoline, or I will say "wet gas", that is the gas including the wet product?

A That is right.

Q And that it, on its way to the marketing of the gas, entered



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into agreements with its wholly owner subsidiary, the absorption plant, whereby the absorption plant company took out the wet product of the gas that was owned by the Hope Company and that what the Commission stated, or what it found was that any profit in excess of so much made by the absorption plant, should be paid over to the Hope Company and that that included remuneration for the gasoline content; now if you are not able to tell me now, you can check it over at noon if you like?

A I would like to look into that and to check into that some more, because that gets into a different aspect.

THE CHAIRMAN: Will you not trust me to read it and try to understand it?

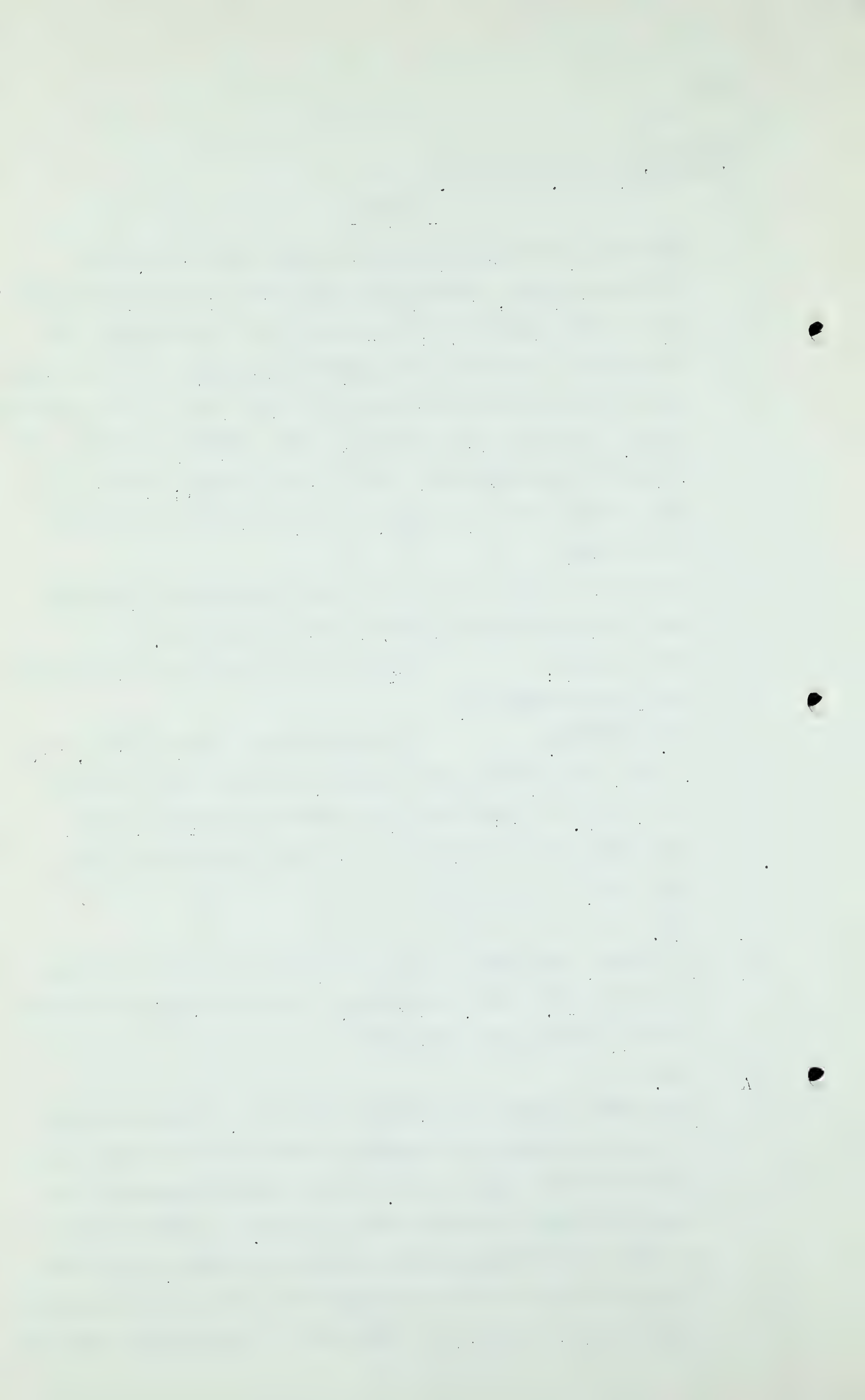
MR. CHAMBERS: I think probably that is fair, but if there is anything that appears, that does not appear in the record, of which you have firsthand knowledge, and I understand that you have some firsthand knowledge of the Hope case?

A Yes.

Q All right, you might let us have that if there is anything you think of. Now, Mr.Zinder, you were present yesterday when Mr. Brownie gave evidence?

A Yes.

Q And again, in order to shorten the matter, I would ask you, if you would take a few minutes at noon and read over the questions which I put to Mr. Brownie, and his answers, as shown in Volume 64, pages 5113 to 5125; Now from what you said this morning in your evidence in chief, I take it that your view is that the charge to be made by the utility company for its services, should not be based on the benefits





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or the profits to be made by the company out of the service rendered or furnished.

A That is right.

Q Would you agree with this proposition that the total revenue or the aggregate of the charges received by the utility company should be based upon the utility company's costs?

A That is right, including a fair return.

Q Oh yes, including a fair return, I mean that.

A Yes.

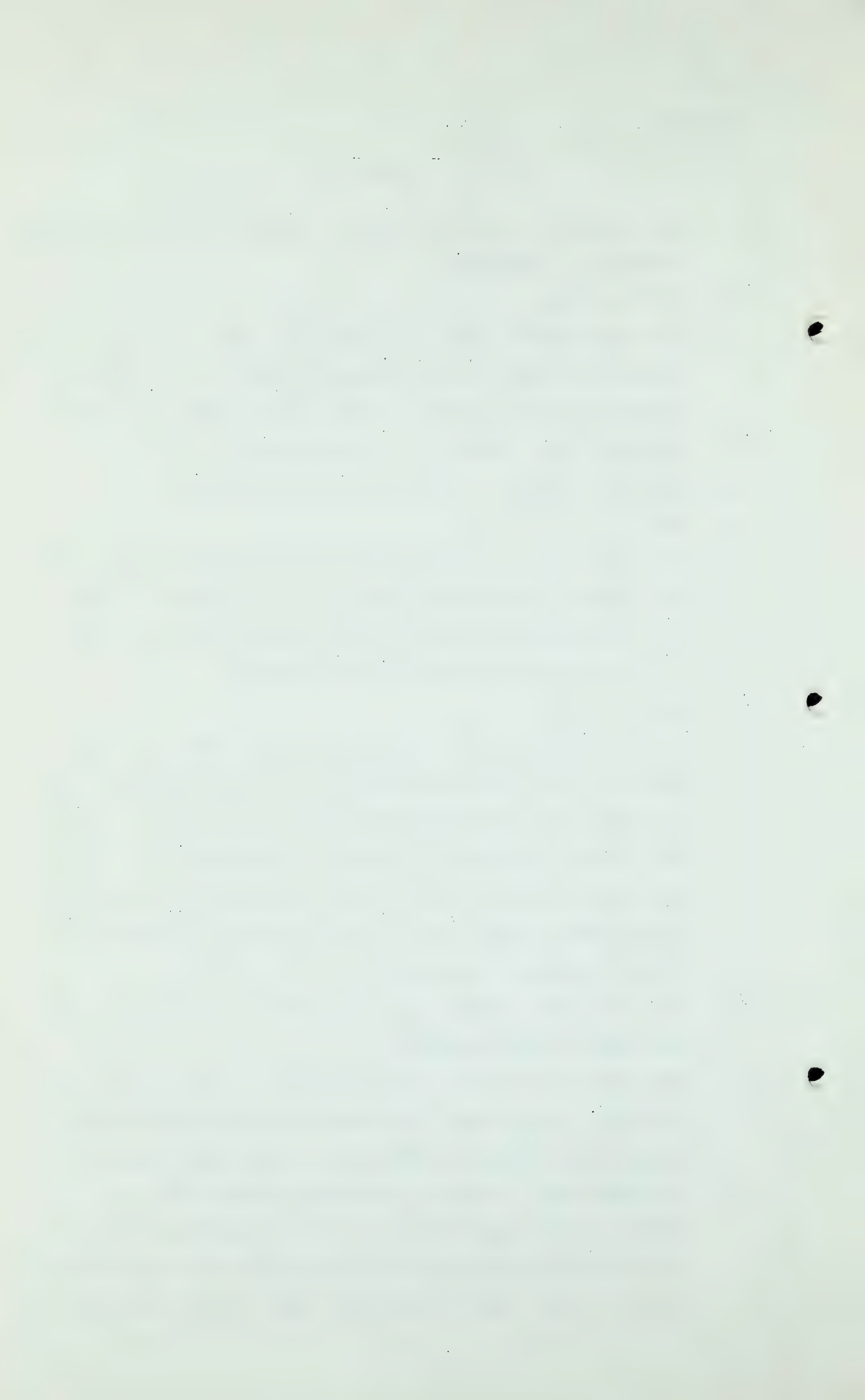
Q In other words, is this a fair statement of your view that the amount, the aggregate amount of the charges of the utility company should be based upon the impact on the utility company and not on the consumer?

A Yes.

Q And am I right in this that in your view that when the Board or the regulatory body <sup>comes</sup> / to allocate the charges or a division of this aggregate income of the utility between the various customers or classes of customers, am I right in this, that your view is that that allocation should be made, having regard to the impact on the utility and not on the particular customer?

A Yes. In other words, it is the costs of the utility, not the costs of the customer.

Q And I put this to you, and I am going to ask you whether you ever, - what your experience has been in the United States in a situation which might arise under similar circumstances, - we will assume we have the City of Calgary with no gas service at all, and pursuant to an Utility Act or regulatory Order a company is formed which obtains a gas supply outside the city limits, some distance



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outside, transports it to the City of Calgary and puts it into distribution and customers, domestic, commercial and industrial, switch over to that gas company, and we will take first of all two industrial consumers, and the one by the very nature of its business, the fact that it has gas now available to it, is enabled to put out its product much cheaper and make far more money, and then you have one right beside it, that is in a different kind of business and in that switch over from the one, from coal to gas, it does not make much difference to it and we will assume they both have the same demand and so on, do you know, in your experience, do you know of any situation or any cases where the rate payable by the two companies would be fixed on a different basis?

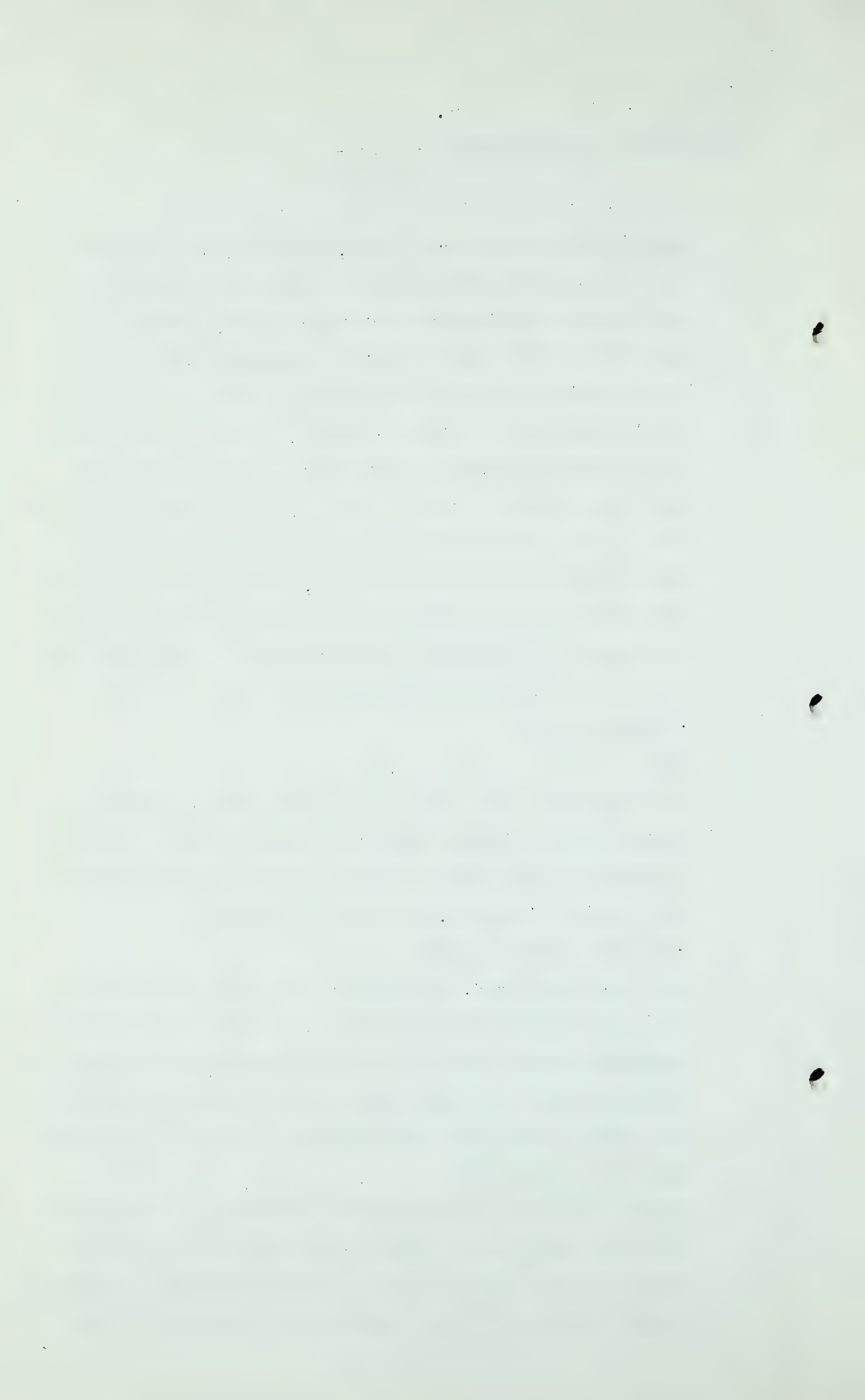
A No.

Q In other words, as I take it, you say that in deciding the amount that any person should be charged for the service rendered by the utility, the main factor is the impact of the nature of that service upon the utility?

A Upon the utility's costs.

Q Yes. Now then take your Exhibit 140. As I understand it from your Schedule "A", Sheet 3, the proportion of the gathering charges which you are allocating to the Absorption Plant are based on volume all the way through, on both sides, the Demand Charges and the Volumetric Charges, is that not the way it works out?

A That is the way it works out, Mr. Chambers. If it happens that the volume at the time of the peak differs from the average volume over the year, I would have made a difference in the proportion of the Demand Costs allocated to the





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Absorption Plant as against the volumetric costs.

Q In other words, you are regarding the fact that at the demand point the Absorption Plant is taking the volume of the peak amount and you are regarding the Absorption Plant as being co-responsible for the demand, along with the dry gas market.

A That is right.

Q Yes.

A That is right.

Q And I think you told us before when you were here that the Absorption Plant as an industry, in removing gasoline from the wet gas, could operate on an even demand throughout the 365 days of the year?

A I assume that they can.

Q Well in other words then, as I understand it, the figures which you have given in Exhibit 140, whereby you allocate the charges to the Absorption Plant, the effect is that the Absorption Plant in paying its percentage, whether it is 9% or 15% or 10%, is bearing that percentage also of the total, of any costs of the utility that are designed to provide continuity of service to the dry gas market.

A Yes, it is experiencing a portion of all the costs, which includes the costs for providing continuity of service, the providing of service and everything else.

Q Yes, and they also pay that percentage of the repressuring costs, if the repressuring costs are all lumped and one percentage is taken, - would not the Absorption Plant be paying a percentage of that too.

A No, they would not be paying a percentage of the repressuring costs. That is, the measure of what the repressuring costs



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are is shown by this allocation.

Q Yes.

A So that there are, in the sum total there is the costs of repressuring but can you break it and say a certain amount goes to repressuring and a certain amount to absorption and a certain amount to market?

(To to page 5256)





M-2-1 - 11.15 A.M.

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Q Mr. Zinder, now on sheet 4 of Schedule "A", Exhibit 140, you show that the average cost of repressuring per M.C.F. of sales is .24 cents. That is in respect to the Madison system ?

A That is the Madison system, yes.

Q And you said in your evidence this morning or your Exhibit that it was not an uncommon practice for present day users of utility gas services to pay through their rate something to cover charges to provide for a future supply. Is that a fair statement ?

A I think that is a fair statement.

Q Have you had any experience or can you give us any enlightenment as to whether this .24 cents is a large amount for future reserves in relation to a price we will say of the retail prices in Calgary now ?

A It seems to me to be a small amount.

Q You have ran into cases where there has been much more per M.C.F. included. Is that right, or have you anything specific ?

A I do not recall actually allocating repressuring costs in cases in the States. The total amount involved represents \$29,000.00 out of a total gathering cost of \$526,000.00 you see.

Q From your answer to Mr. Steer about the three absorption plants, I take it that you would agree with this proposition, or I would like in any case for you to let me have your view about it. Suppose we have a situation where gas is going direct from the well to the market and we have no absorption plant. Obviously you would agree that under those circumstances all the gathering charges would be



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charged to the retail rate ?

A All be charged to the market, yes.

Q Well yes, then let us suppose a situation developed where recognition is given to the fact that there may be something in this gas of a wet product that can be taken out and it may come to the place where it has to be taken out. I take it under those circumstances you would not suggest that all of the gathering charges should still be charged to the market. Do you see what I mean ?

A Well under those circumstances I assume you have the situation you have here now.

Q Yes.

A Yes. My answer would be that I would do it as I have done it here, yes.

Q Now Mr. Zinder I want to suggest this to you that if this Board or the regulatory Board should decide to fix wellhead price of gas on the basis of the value to the retail consumer less the Gas Company's distribution, transmission costs, less the scrubbing plant, less the gathering charges, including the repressuring charges, and what is left is the well head price. I suggest to you under those circumstances the producer is paying the repressuring costs, is he not ?

A No, I do not see it that way. You say we have a certain price that we are charging the consumer.

Q And I said it was the value of service to him.

A The value of the service and let us assume the value of the service is 30 cents taking any figure.

Q Yes.

A Let us assume further that all costs, including cost of repressuring is twenty-five cents. That would leave a value

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at the well say of five cents. I cannot any more say that the producer has paid for the cost of repressuring than I can say that the producer has paid for the distribution cost and all the other costs.

Q Suppose there were no repressuring costs. Would not the producer get the .24 cents for it ?

A Yes.

Q Then does it follow that if the wellhead price is going to depend upon what the Utility charges in between, the producer is really paying absorption repressuring costs ?

A I would not agree with that. I think I might make an illustration of this. Let us assume something very hypothetical and far fetched. Let us assume we have a value for gas here and the domestic consumer can get it out of his back yard. He is a producer and the value in heating to him is 30 cents, but say value is increased, if your costs, intervening costs, are down that does not mean the producer has paid for it, those items.

THE CHAIRMAN: You have reached, Mr. Chambers, the economic fallacy of starting at the wrong end.

MR. CHAMBERS: The Legislature I submit has said that is an end that has got to be considered anyway.

MR. CHAMBERS: Thanks, Mr. Zinder.

THE CHAIRMAN: Mr. Harvie ?

MR. HARVIE: I have no questions.

THE CHAIRMAN: Mr. Blanchard ?

CROSS-EXAMINED BY MR. BLANCHARD:

Q In your statement Schedule "A", sheet 4, you use a figure of gas sales there of 16,509,000. I am not quite sure how you use the figure 15% as being the proper percentage to be borne

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by the absorption plant gathering ?

A Yes.

Q In one of your statements or submissions or part of your evidence and then you use 9.5% in the computations attached to Exhibit 140. I am not just sure where the difference comes in, that is all.

A The difference comes in in this way, Mr. Blanchard. The 15% I was using as the rough overall general figure and that when it came to get the actual figure at least I was shown in Madison Company's M-12 I believe it is, it shows the absorption plant shrinkage and fuel as  $9\frac{1}{2}\%$  and that is the figure I used.

MR. STEER: I think we have all been using 15%, just as a rough figure.

A That is right.

Q MR. BLANCHARD: And  $9\frac{1}{2}\%$  includes fuel and shrinkage ?

A That is right Mr. Blanchard.

Q That is used in the plant ?

A Yes.

Q Based upon M-12 ?

A That is right.

Q Then you base also your proportion of what should be paid by the absorption plant on the sales of gas. I refer you to Page 4.

A What I did was, I wanted to get the total M.C.F. of gas at the inlet of the absorption plant. Now then that after going through the absorption plant from that point on, we have had three uses. One, the amount used in the absorption plant. Two, the amount going to the market. Three, the amount that is repressured. So using that figure M.C.F. of

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Cross-Exam. by Mr. Blanchard

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the total volume at the inlet of the absorption plant at 100% I have broken it down in percentages to those three uses.

Q Well I was looking at Mr. Hamilton's submission, Exhibit 124, Statement 39, and these are actual figures furnished by Madison, that the net wet gas gathered and put into the absorption in 1944 was 20,524,000,000 cubic feet of wet gas.

A The total wet gas gathered in 1944 ?

Q The total wet gas put into the absorption plant, the Royalite absorption plant in 1944 was 20,524,000,000 cubic feet of gas. Those are the figures furnished by Madison.

A Well these figures that I have here as stated and shown are data obtained from the Madison Company and as I am advised were the actual 1945 volume. Now I started the computation of those volumes Mr. Blanchard, they are somewhat complicated. There is metering differences and there are losses and different things of that kind that have to be taken into account.

Q Those are deducted before arriving at the figure I have mentioned.

A I would like to say this Mr. Blanchard, that the important thing as I see it is not so much the actual figures as getting proper relationship or percentage. In other words if both figures are up by a certain error, if you get the same percentage you come out with the same final answer. But this is the best information I could obtain for actual 1945 figures.

Q Yes. Then you will agree that the absorption plant must pay its proportion of the costs of gathering of the gas

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The first of the year was a very dry one, with only a few light showers of rain. The weather was generally very hot, and the sun was very bright. The crops were very dry, and the grass was very short. The water in the ponds was very low, and the fish were very dry. The people were very poor, and they were very hungry. They were very sad, and they were very angry. They were very poor, and they were very hungry. They were very sad, and they were very angry.

The second of the year was a very wet one, with many heavy showers of rain. The weather was generally very cool, and the sun was very bright. The crops were very wet, and the grass was very long. The water in the ponds was very high, and the fish were very wet. The people were very poor, and they were very hungry. They were very sad, and they were very angry. They were very poor, and they were very hungry. They were very sad, and they were very angry.

The third of the year was a very dry one, with only a few light showers of rain. The weather was generally very hot, and the sun was very bright. The crops were very dry, and the grass was very short. The water in the ponds was very low, and the fish were very dry. The people were very poor, and they were very hungry. They were very sad, and they were very angry. They were very poor, and they were very hungry. They were very sad, and they were very angry.

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whether all the gas is sold or not because it passes through their plant ?

A Yes, I agree with that Mr. Blanchard.

Q We are agreed on that ?

A Yes.

Q All right, and those figures are correct, twenty and a half billion cubic feet went into the Madison Absorption plant in 1944. Then the absorption plant must pay its proportionate cost of every cubic foot of that ?

A Yes, I would say that sir.

Q All right, by the way there have recently been enacted certain conservation measures in the State of Texas I think it is ?

A Yes, they have passed conservation laws, yes.

Q Involving repressuring of gas for which there is no present market ?

A That is my understanding they do, yes.

Q That is one of the important aspects of the new Legislation in Texas ?

A In recent legislation, yes.

Q And since that legislation has come into effect have there been any cases before the Federal Power Commission dealing with the allocation of repressuring costs.

A Mr. Blanchard, /<sup>first of all</sup> in any of the Federal Power Commission cases it has not been necessary to allocate costs between repressuring and other uses. The total costs are taken as chargeable against operations and included in the rates.

Q There is no comparable situation to the one we have here. Is that right ?

A Except it is comparable in this sense. There has been the

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problem of allocating for example gathering costs as between sales under which the Commission has jurisdiction to sales under which the Federal Power Commission has not jurisdiction. Now the method I have described in outline has been used in those cases. And in practically all the cases there has been the problem of allocation as between jurisdictional sales that the Commission can regulate and non-jurisdictional sales with the exception of Panhandle Eastern Pipeline case where no allocation was adopted by the Commission.

Q And that has been done you say on a volumetric basis ?

A Yes.

Q Volumetric demand ?

A Yes, in those cases for example there may be substantial excess earnings on business but the Commission had no jurisdiction over it and could not order any reduction and those excess earnings were not credited back but the Company permitted to keep them and the reduction made only on what it could and had jurisdiction on. There was no attempt or no suggestion in any of those cases that gathering costs ought to be allocated differently in that case than it would where it is all under the jurisdiction of the Commission.

Q Now your basis of allocating costs so far as the absorption plant is concerned is exactly the same as if they were sold so many cubic feet of gas ?

A That is right.

Q That is taking your figure of 1,000 cubic feet going in and the absorption plant using 150, that is the proportion that should be paid ?

A That is right.

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Q Now then in the other case of a Foundry to which you deliver 150,000 cubic feet of gas. There you carry for that Foundry just that 150,000 cubic feet of gas, don't you ?

A Yes.

Q And in the case of the absorption plant you do something more than that. You do not simply deliver the absorption plant 150,000 cubic feet of gas. You deliver the absorption plant 1,000 cubic feet of gas and my suggestion is that you are performing a service to the absorption plant in the use of your installations over and above the gas they actually take out of that. That is my suggestion.

A I recognize your suggestion Mr. blanchard and as I stated as a result of your question the last time gave it a great deal of thought and the only answer I could give to it is what I have stated here, namely, there is a service performed. The absorption plant performs a service and benefit and you are in the field of benefit and as I stated here I do not know where you would come out or how you would try to measure it.

Q You agree there is a benefit ?

A There are many benefits always, yes.

Q The only reason the consumer in Calgary is going to pay anything for repressuring is because he anticipates or it is anticipated he is going to get a benefit ?

A Yes.

Q You are repressuring the gas and the gas that is repressured is in trust for the consumer ?

A Yes.

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H-3-1 11.35 a.m.

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Q Is there anything to justify you doing that?

A Well, yes. I say as far as the absorption plant is concerned, you can see it gets a benefit because it processes all the gas.

Q Yes?

A I can only repeat what I have said here, the consumers will benefit, because they get a better product for burning purposes.

Q Yes?

A The absorption plant has to be designed to meet the peak load which, if it did not process the gas, it might or would operate on a higher load factor. There are those benefits coming among others, and, as I say, I do not know where that answer would come out, if you tried to measure them or weighed them, or if you could do it.

Q Would you think that it might be right in principle to assess according to benefits if you can find a proper equation to apply, you would, wouldn't you?

A Well, I still don't believe that allocations on that basis, Mr. Blanchard, would do it. You do have somewhat of an unusual problem in the case of an absorption plant. It is not a simple matter, it is quite unusual.

Q Now suppose that some other use for this repressured gas appears in the next five years, and perhaps you know that Colonel Thompson of the Bureau of Mines said that natural gas should not be used as a fuel at all, that it has a great detention value for other purposes?

A There is much talk of that in the States.

Q Now, in order to charge the consumer with the cost of repressuring, you must assume that there is a trust impressed on that gas, is that correct?



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A Would you mind reading the question again to me?

BY THE REPORTER READING: "Q. Now, in order to charge the consumer with the cost of repressuring, you must assume that there is a trust impressed on that gas, is that correct?"

A I will say yes.

Q MR.BLANCHARD: That he is going to get it some day?

A Yes.

THE CHAIRMAN: A dedication?

A Yes.

Q MR.BLANCHARD: A dedication, yes.

A Yes.

Q And if there is no such dedication inherent in this legislation, or in any orders of the Board, then what would you say?

A I would say that he still, the producer is still putting that gas up for the market. There is no guarantee or anything of that kind involved, even if there is no legislation required, that he do so. It is a reasonable expense that ought to be allowed.

Q Well, now, the producer.....

A In other words, the producer could not go wild, Mr. Blanchard, or something of that kind. The expense would have to be reasonable.

Q Now, the producer has an option of doing one of two things, I think we agreed to that before. He has an option of producing only his market share and postponing production of his oil?

A Yes.

Q And by so doing he probably loses interest on his investment because he will have a longer period to realize?

A I see.





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Q Is that correct?

A Well, I don't know what the facts would be.

MR. McDONALD: You are using that as an assumption by the witness. Those are not the facts in Turner Valley, according to the evidence in the case.

THE CHAIRMAN: I think it was put alternatively.

MR. McDONALD: Well, as long as it is an assumption.

Q MR. BLANCHARD: There is no doubt about this, we do not have to assume this, the producer need not produce more than his market share?

A Yes, I will assume that.

Q And if he does not produce more than his share of the market gas, that means that he is postponing his share of the oil?

A I am assuming that is right.

Q Do you need to assume that?

A No, that is right.

Q All right. So that, assuming now that he does eventually recover the same quantity of oil over a longer period of years, then what the producer suffers in only producing the market share, is loss of quick realization and, therefore, loss of interest on the investment?

A Well, there are so many factors involved.

Q He does not realize on the investment over a long period of time. Perhaps we do not need to labour that. I will come to something else?

A All right.

Q He has that option, and if he exercises that option, then there would be no cost of repressuring in Turner Valley at all, that is correct, is it not?

A Yes, that is right.

Q So that in looking at it from one standpoint at least, it is



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because the producer desires to produce more than his market share that makes repressuring necessary?

A Yes.

Q That is right, isn't it?

A Yes.

Q And, I suppose, on the other hand, you could approach it from another standpoint, and say that here was an industry that was in operation, the oil industry?

A Yes.

Q And for the benefit of the consumer legislation has been passed to say that the additional gas must be put in the ground for the benefit of the ultimate consumer?

A Yes.

Q From the first standpoint, would you say that the producer should pay for the costs of repressuring?

A No.

Q THE CHAIRMAN: I thought you had already said that?

A Pardon?

Q I thought you had already said that?

A Maybe I did not understand.

Q MR. BLANCHARD: From the first standpoint, if the producer had produced only his market share, then there would be no repressuring, and it is only because that the producer desires to produce more than his market share, that is, produce more gas, that repressuring becomes necessary.

MR. HARVIE: You would have to change the formula for market-sharing, because it is based on what he is producing. If he produces twice what he can sell, then he has to repressure half of it.

MR. BLANCHARD: I do not know about that.

MR. HARVIE: Market sharing is based on what he





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produces. If he produces twice what he can sell, then he has to repressure half of it. If he does not produce that one-half, his market sharing position is cut in half and then he only gets half of what he produces.

MR. STEER: If he only produces his market share, there is no repressuring problem then?

THE CHAIRMAN: The market share of the gas. Go ahead, Mr. Blanchard.

MR. BLANCHARD: All right.

THE CHAIRMAN: And there was the second phase.

Q MR. BLANCHARD: The second approach, I suggested to you, was an entirely different approach, and one that is diametrically perhaps, opposed to the first basis. That is, that there was, before repressuring was contemplated at all, that there was an established industry, the oil industry, and that that oil industry was entitled to continue to produce oil as an oil industry?

A Yes.

Q And that the repressuring then is something that is entirely for the benefit of, not the oil industry, but of some other person, the ultimate consumer, of that gas, whether it be someone in Calgary, or a carbon black plant or chemical plant or some other plant of that kind?

A That is right.

Q And I do not know on which side the equity lies there, as to allocation of costs?

A Well, if I might say, with regard to the first proposition that you put, if the producer limited himself to his market sharing position, there would be no cost of repressuring. Now,



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he wants to increase his production and he cannot increase his production except at certain costs of repressuring. He has been denied the right to do that except by incurring those costs. Now, those costs have been imposed, you might say, upon him because of certain benefits to the public. Now, even in that case you might reasonably raise the question of who should pay those costs.

Q Yes. That is there are two points of view?

A Yes.

Q They are two points of view?

A Yes.

Q THE CHAIRMAN: And he gets the benefit and a price for something that is otherwise useless? He is getting a benefit there?

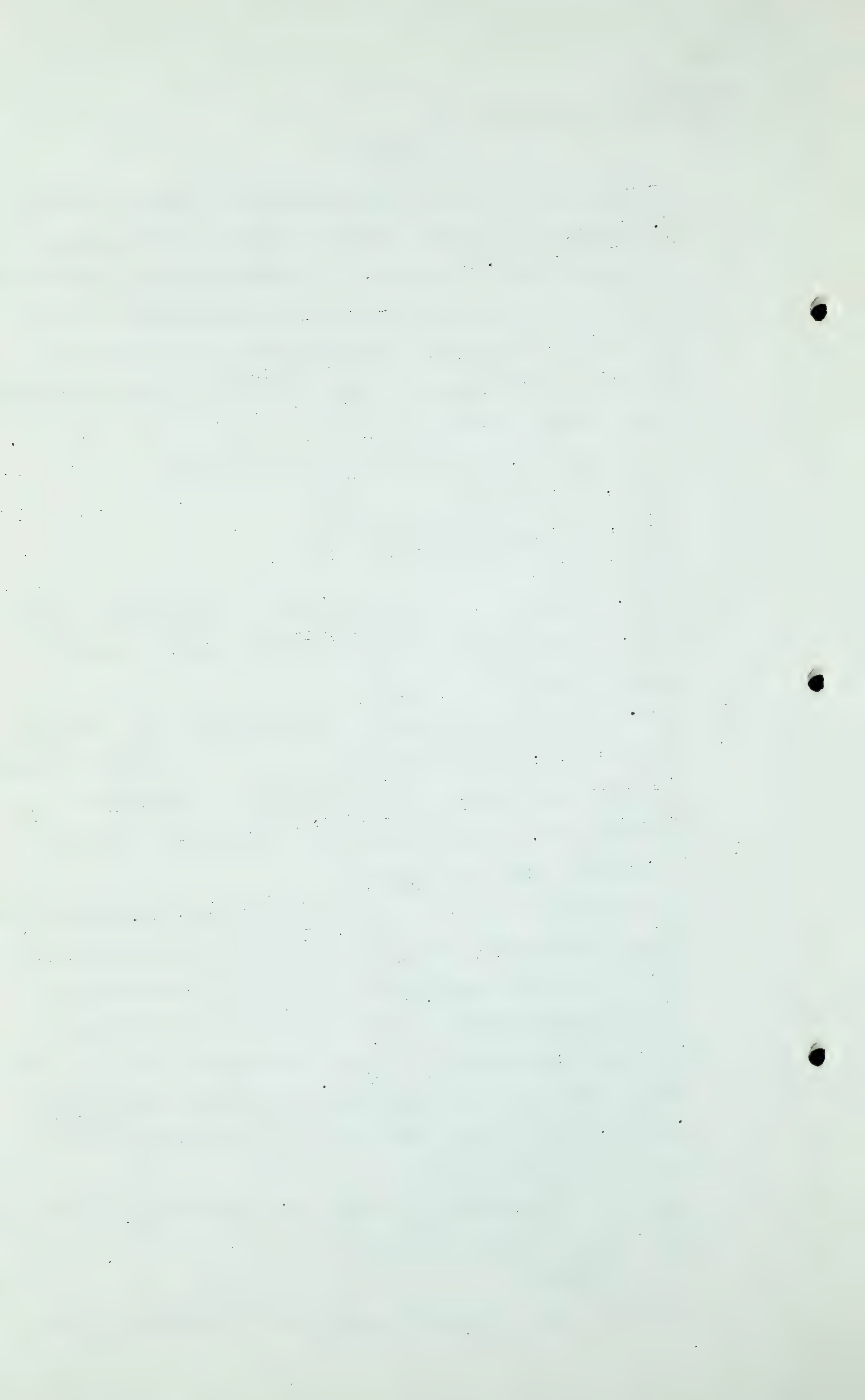
A Yes. I think with the passage of legislation, Mr. Chairman, many things of that kind happen. If the city passes a zoning ordinance and permits a certain section to be used for apartments or businesses, they give one value to the land against what was there before.

Q MR. BLANCHARD: All right. We have two propositions almost diametrically opposed, as to where the burden should lie. Now, if the gas is not dedicated to any particular class of public, if it is not dedicated, for instance, to the Calgary gas market or to the Gas Company, now then, you still say that the Calgary Gas market should bear all the costs of repressuring where there is no dedication at all? I mean, why pick on them?

A Well, the only purpose, of course, of repressuring is that it has a value and for the public.

Q For the public?

A Yes. So there, actually by agreement or otherwise, it is





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really dedicated to the public.

Q When you say "dedicated to the public", you mean dedicated to some useful purpose in the future?

A Yes, that is right, public purpose.

Q Not necessarily dedicated to the Canadian Western Natural Gas, Heat, Light and Power Company?

A That is right.

Q That is right?

A That is right.

Q Because that is where you are trying to lay the burden of costs?

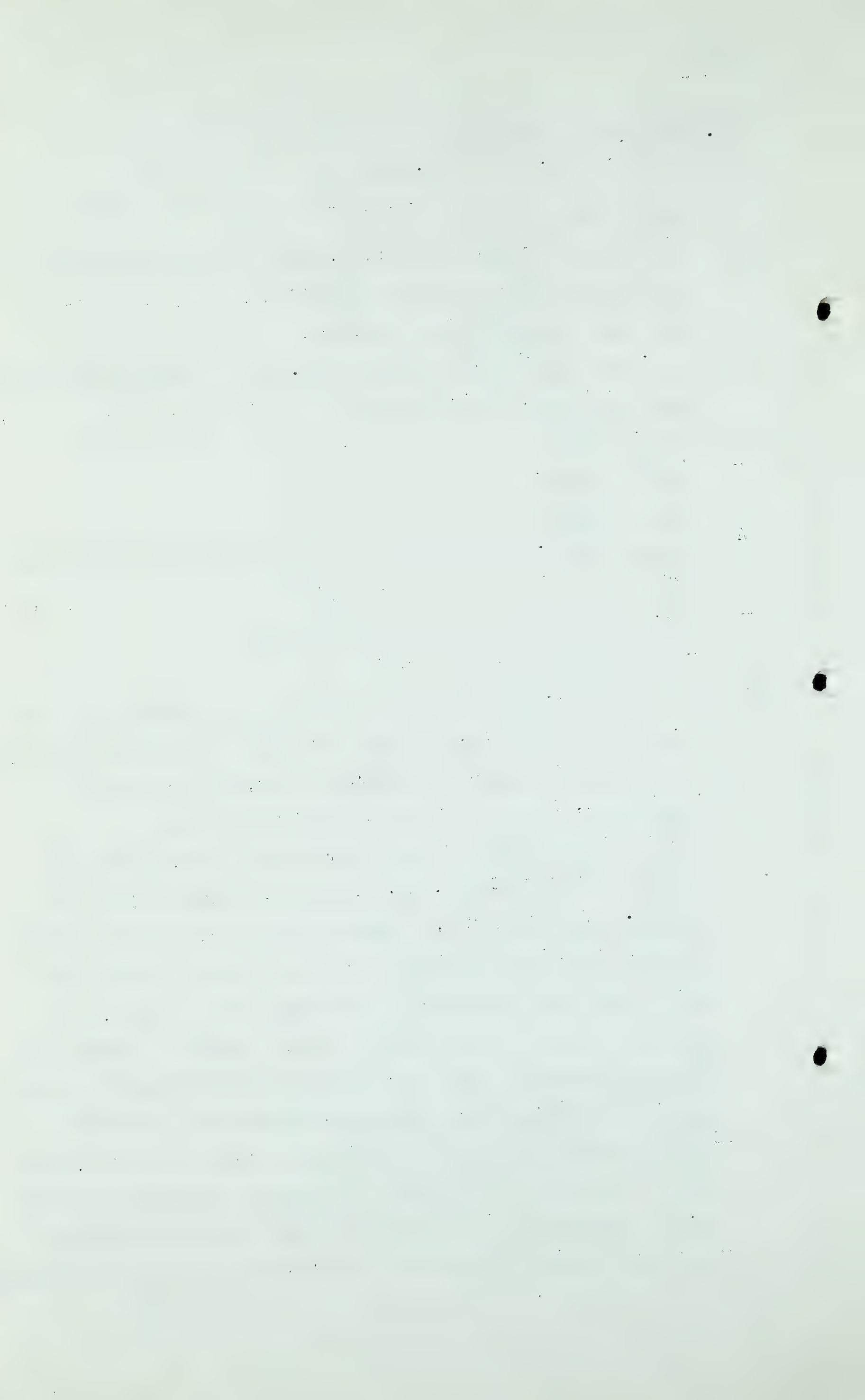
A Yes.

Q And pass it on then to certain consumers?

A That is right.

Q So, as we said before, your opinion that the incidence of cost should rest on the gas consumer, that is, the customers of the Gas Company, is based on the assumption that there is a dedication of that gas to that particular plant?

A That is substantially so, Mr. Blanchard. I would like to explain. A company may, let us take an electric generator company, might build a big hydro-electric dam years in advance of when it is actually going to be used for the market, you see? They have to build ahead of time, and the dam takes quite a bit of time to build. The cost might be charged to existing markets. Yet, let us say, one of its biggest markets might be lost before that dam finally goes into operation. Certain costs there have been charged to that market for that dam, you see? It is then what might be reasonably expected. And I think that is all you can do now, is what you think might be the case, and you may be charging the Calgary consumers



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today or tomorrow for the repressuring costs, and it develop eventually that they do not get the benefit, but Lethbridge or some place else gets the benefit. But it is to be reasonably expected that they will, I would say those costs, should be or might be charged.

Q THE CHAIRMAN: Mr. Zinder, you tell us an allocation of costs on the basis of benefit is unknown to you?

A Yes, Mr. Chairman.

Q You know of no case where that basis has been used?

A I do not.

Q Would that make it wrong to do so?

A It would not follow, Mr. Chairman, no.

Q You would agree with the general principle that where a service has been given there would be implied a right of payment to the person who performs the service?

A Yes.

(Go to page 5272).





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Q If you cannot evaluate it scientifically, then you can evaluate it on the basis of service if you do not go beyond 100% ?

A That is right.

Q Of an available surplus ?

A Yes, that is right.

Q And it becomes a matter of personal judgment ?

A Yes.

Q Within the limits of the money that you have available, after everything has been taken care of ?

A That is right.

Q Now, I want you to assume, and I am going to use figures which have no relationship whatever to Turner Valley, but it is the Turner Valley problem I am thinking of, Mr. Zinder. We have in Turner Valley three absorption plants, and they have been paying the total cost of gathering gas, and they have been flaring the balance, with the exception of Royalite, which sent some of it on to the market when it needed it. Then we have legislation, which has this thought, that gas which once was flared before, or, rather, gas was flared without ever going to the absorption plant is now going to the absorption plant, as we will assume that the absorption plant will operate for the next twenty-five years, has a life of twenty-five years, and as a result of this legislation the life of that absorption plant is extended by another twenty-five years, and because there is now a market for the residue gas that absorption plant which had its life doubled has its cost of gathering reduced by, we will say, 30%. Now, that the market has its life extended, is there any way of allocating or rather, there is no

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scientific way of allocating, but wouldn't it be proper for a person to use individual judgment and make some allocation of the benefits which the absorption plant receives and the market receives, instead of putting the absorption plant in the position of having its life doubled and its operating costs cut down. Have I expressed it clearly enough, Mr. Zinder ?

A I think so, Mr. Chairman.

( Go to Page 5274 )

1. Introduction

2. Methodology

The study was conducted in a laboratory setting. The participants were recruited from a local university. The experiment was designed to investigate the effects of sleep deprivation on cognitive performance. The participants were divided into two groups: a control group and an experimental group. The control group was allowed to sleep normally, while the experimental group was kept awake for 24 hours. The participants performed a series of cognitive tasks, including a memory recall test, a decision-making task, and a reaction time test. The results of the experiment showed that the experimental group performed significantly worse than the control group on all tasks. This suggests that sleep deprivation has a negative impact on cognitive performance. The study was limited by the small sample size and the lack of a double-blind design. Future research should investigate the effects of sleep deprivation on a larger sample and in a more controlled environment.

3. Results and Discussion





T-3-1 11.55 A.M.

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A I think so, Mr. Chairman.

Q I would just like to have your view on it.

A Well my answer, Mr. Chairman, to the question would be that first I do not know how, you try to do it of course scientifically and therefore it would be a case of judgment. I would still allocate on the basis of costs maybe because I am an engineer by training and maybe because a simple precedent does not make the other necessarily wrong. It may be also because I would wonder whether those were all the benefits pro and con, you see. The benefits of the Absorption Plant as against the benefits the consumers would received. I could visualize as a matter of administration that these benefits, if I were to put it on that base, might vary considerably from time to time. I would feel called upon then to maybe to have to review the situation very frequently. My own opinion would be it does not give a basis for, let us say, ready administration.

Q Is this not true that no matter what the allocation is the Absorption Plant is in a better position than it was before?

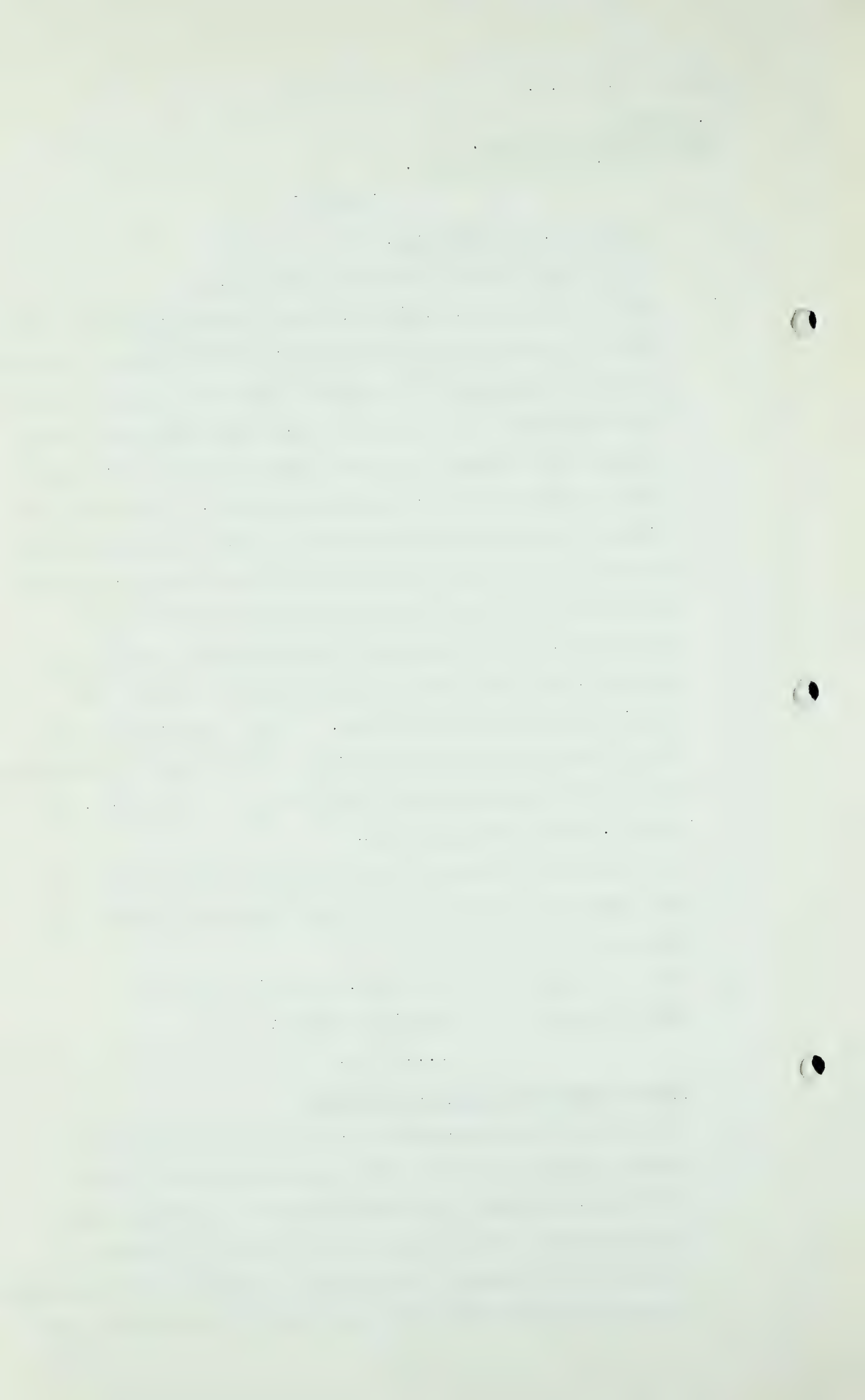
A Yes, I assume that it is, yes. Well it is true.

THE CHAIRMAN: Anything further?

.....

CROSS-EXAMINATION BY MR. CHAMBERS.

Q There is one question, maybe Mr. Zinder could answer it without referring to the case. My understanding is in the Hope case where the subsidiary of the utility company was to pay over or to credit to the utility everything in excess of a certain percentage of earnings, the Commission proceeded on the assumption that the utility company would



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have to supply any deficiency if the time arose when the subsidiary company could not operate at a profit.

A That is right.

MR. STEER: Is that in the judgment? It is in the judgment?

MR. CHAMBERS: Yes. That is all.

THE CHAIRMAN: Shall we adjourn for good or shall we adjourn until 2 o'clock? Is there anything further?

MR. McDONALD: There is one question, Mr. Chambers asked in regard to reading the evidence of Mr. Brownie.

MR. CHAMBERS: You mean the decision in the Hope case?

MR. McDONALD: No. Mr. Zinder was to read Mr. Brownie's evidence.

MR. CHAMBERS: I wonder if we could adjourn for a few minutes?

MR. STEER: I have not the slightest doubt Mr. Zinder will agree with that.

THE CHAIRMAN: I am willing to come back in the afternoon or I am willing to sit and finish now.

MR. STEER: Could we finish now, sir?

MR. HARVIE: If we had a 15 minute adjournment now?

MR. CHAMBERS: I still think we would be through by 12.30.

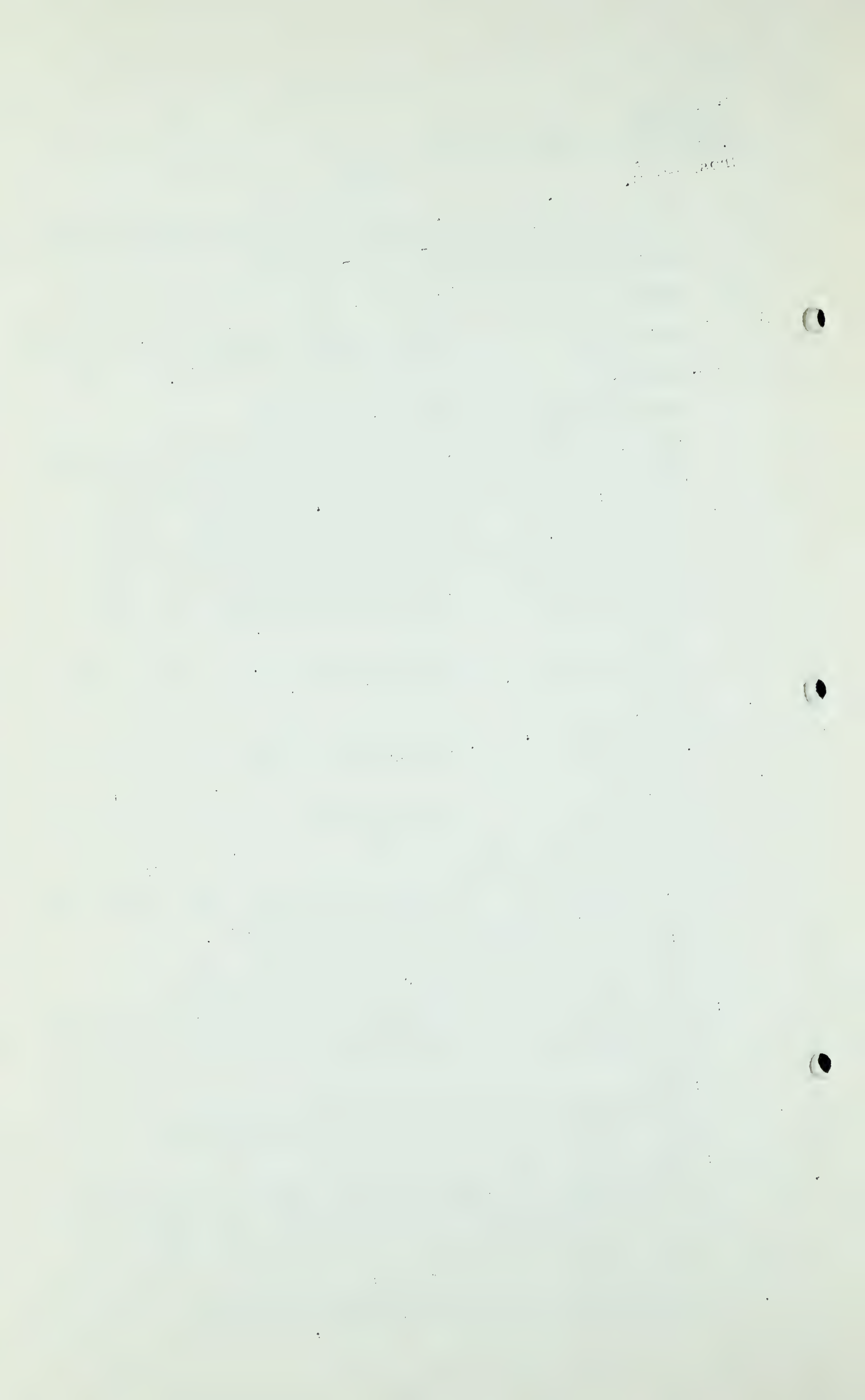
Q THE CHAIRMAN: You want to read something?

A Yes.

THE CHAIRMAN: Then we will adjourn and as soon as you are ready let me know and we will start again.

A All right.

(At this stage there was a short adjournment.)





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CROSS-EXAMINATION BY MR. CHAMBERS, Continued.

Q Now, Mr. Zinder, I understand in addition to you being present yesterday you have read the questions and answers on the examination of Mr. Brownie by myself, commencing at the top of page 5113 down to and including the second line on page 5125.

A I have.

Q Will you give us any observations you have to make. Do you agree in whole or in part?

A I agree with the answers given by Mr. Brownie with the exception of wanting to make one qualification or addition. On page 5119 Mr. Brownie was asked whether - well I will read the question:

"And it might also arise if two customers pay similar prices for essentially different services, would that not be so?"

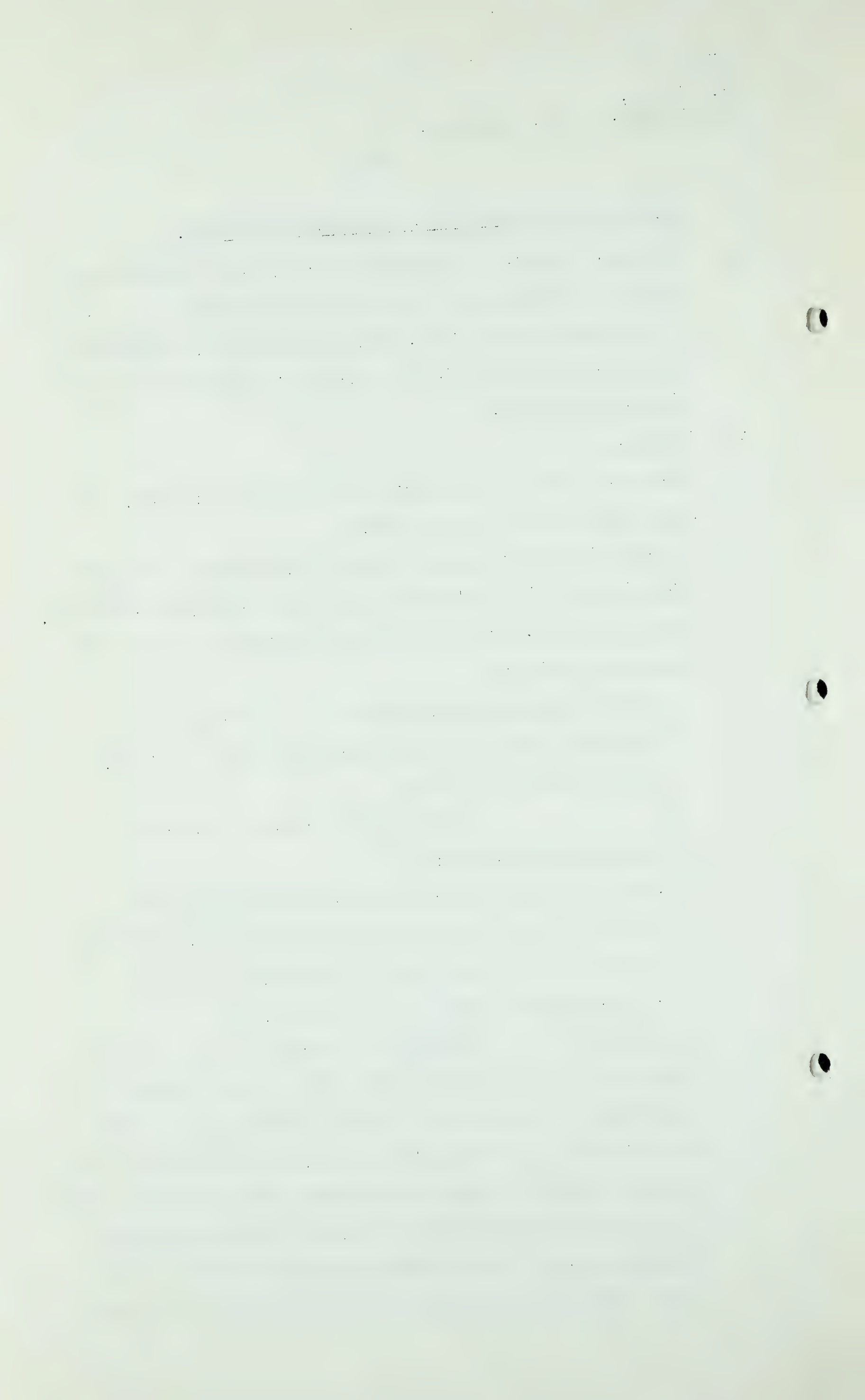
And later on, after elaborating the question, he answers:

"You mean two customers that are paying the same rate, one for what might be called inferior service and the other for a superior service. Q. Yes.

A. Yes, that would be discrimination."

MR. STEER: What page is that?

A Beginning at the bottom of page 5119 and continuing on page 5120. I do not know what Mr. Brownie had in mind by "inferior" and "superior" services. My answer to that question would be that two customers paying similar prices for essentially different services, that that would be discrimination. By different services it can be the same grade of service but it would be a different load



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factor for one than the other or a different volume of one to the other. The statement of Mr. Brownie about inferior and superior implies grade of service rather than the characteristic of service. My answer would be that if the cost characteristics differed and the same price were charged, in my opinion that is discrimination.

Q THE CHAIRMAN: Would you not have to take value into consideration? That is one thought I had, one might be inferior and the other superior in quality but they might be equal in value to the individual customer.

A If they were inferior and superior in quality that would imply a different cost of rendering the service to them. And if the same rate were charged in my opinion it would be discrimination. I would not say it would be discrimination if the value to these customers of that service were different. With just that comment, Mr. Chambers, I agree with Mr. Brownie's answers to your questions.

MR. CHAMBERS: Thank you.

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DIRECT EXAMINATION BY MR. McDONALD.

Q There is just one matter I was going to refer to in regard to Mr. Blanchard's examination. As I recollect it, Mr. Zinder, you did refer to the crude oil producer restricting his production to the market sharing position for the gas production.

A Yes.

Q Would you give consideration to this, that that would only occur in the event that the price received by that producer for his gas would approximate whatever loss he was suffering or added expense that he was incurring in





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regard to his crude oil operation?

A By limiting his output to the equivalent of his market sharing the producer loses certain advantages that he would otherwise have, if he could produce all he wanted, let us say, at a time when the market price for oil was high and therefore his profits might be large, he has lost that opportunity of course if he is limited to his market sharing position.

Q THE CHAIRMAN: Here is another situation that might very well arise. Supposing we discover another oil field in Alberta comparable to Turner Valley. The war is over. These two fields are pro-rated in the production of oil to the market demand. That has happened before and it can happen again. Then if the gas production happened to equal the gas market demand, you would have exactly Mr. Blanchard's situation over which the oil producers had no control and no repressuring would be needed.

A That is right, Mr. Chairman.

THE CHAIRMAN: Anything further? Then we adjourn until the 4th of February.

MR. CHAMBERS: Do we sit on the week of the 11th of February?

THE CHAIRMAN: No, because Mr. Blanchard has a heavy criminal Appeal Court, including the Barris' Appeal that week, is that not so, Mr. Blanchard?

MR. BLANCHARD: That is right.

MR. CHAMBERS: There is this other point too about what further evidence may be brought before the Board as a result of the Court of Appeal decision.

MR. STEER: I wonder if I can get from my learned





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friend whether they are serious in wanting us to produce our balance sheets which are, of course, available and if they are serious in wanting our Profit and Loss statements. A whole lot of the information that was asked for in this Notice of Motion has already been made available and I suggest that my clients' attitude will largely be governed by a statement as to exactly what is required. It may be that we will conclude, if my learned friends will tell us exactly what they need, that we can give it to them.

MR. CHAMBERS: I would say that is a reasonable suggestion and it will save time and expense.

THE CHAIRMAN: Well I hope you will do this, I hope you will arrange to have enough to keep us going on the 4th, 5th and 6th because on that assumption I fixed another Hearing in Calgary for the 7th and I do not want to be here perhaps a day and a half with nothing to do.

MR. CHAMBERS: Mr. Brownie will be available on the week of the 4th?

MR. STEER: Oh yes.

MR. McDONALD: I understand Mr. Davies has a statement for that week.

MR. STANLEY DAVIES: Just prices, that is all.

THE CHAIRMAN: That is as far as we can go now.

We will sit again on the 4th. We might have another hearing on the week of the 11th, Mr. Chambers. We might still be engaged on another Hearing on the week of the 11th.

(At this stage the Hearing was adjourned until 9.30 A.M.  
4th February, 1946.)

.....



Mr. [Name] [Address]

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I have the honor to acknowledge the receipt of your letter of the 12th inst. in relation to the matter of the [Name] [Address] and to inform you that the same has been forwarded to the proper authorities for their consideration. I am, however, unable to give you any definite answer at this time, as the matter is still under consideration. I will, however, keep you advised of any further developments. I am, Sir, very respectfully,  
Yours truly,  
[Signature]







